

ARCHITECTURE DEPARTMENT

CHINESE UNIVERSITY OF HONG KONG

MASTER OF ARCHITECTURE PROGRAMME

2008-2009

DESIGN REPORT



**URBAN RUINS:
EMPOWERING THE UNDER PRIVILEGED**

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Urban Ruins – Empowering the Under Privileged

Thesis Report -
Research Phase

4-17 **Urban Ruins: Empowering the Underprivileged**

This thesis is inspired by two social and economic issues: *Urban Ruins* and migrant workers. Here urban ruins refer to suspended or abandoned structures resulting from speculation failures caused by market and financial fluctuations. Through a comparison between these unoccupied and often unfinished structures and "traditional" ruins like those resulting from natural disasters, it is obvious that they share common characteristics and *Urban Ruins* are thus named. For example, they both consist of visible and invisible parts, though they represent different time and space.

18-23 **Guangdong Region**

Following the real estate boom in the 1990s, there were once more than 300 *Urban Ruins* in Guangdong Province. However in the past 10 years, most of the suspended projects have been resumed and completed by developers, this phenomenon has given rise to worries at the beginning of research that it might not be the right time to touch on this issue, yet the recent financial crisis has again proven the periodic nature of the issue that is worthwhile further investigation.

24-37 **Shenzhen - Dongmen Building**

Dongmen Building one of the remaining few existing *Urban Ruins* in Shenzhen urban area. It is a special case that the cause of its suspension is not only financial and market forces, the original developer has been cheated by other company, taking away all the capital that were invested into this building, the construction was then brought to a halt since the completion of the concrete structure more than 10 years ago. This is going to be the site of the intervention.

38-43 **Shenzhen - A Transient City**

Apart from the property market, Shenzhen has been growing exponentially since it was declared Special Economic Zone in 1979, plus its geographical advantage of its proximity to Hong Kong, it has been functioning as the hinterland to Hong Kong providing cheap products and services. The manufacturing industry and services sector flourished, attracting migrant workers from all over China. These migrant workers do not have a local *hukou*, meaning they are not registered residence in Shenzhen, they face problems of employment, accommodation and low wages. Making the migrant workers the underprivileged and over exploited group in the economy.

According to a recent survey, there are as much as 100 million migrant workers in China, of which one tenth of them are working in the Guangdong Province. Migrant workers, together with associated Village in the City issue pose a rising social demographic problem to the authorities.

44-49 **Program**

Based on these two issues, *Urban Ruins* and migrant workers, a programmatic approach has been adopted. The proposed program is composed of 3 scales, firstly on a citywide scale responding to periodical market fluctuations that created *Urban Ruins* by taking the abandoned structure as a host for intervention. Secondly on a national-wide scale dealing with perennial population flow of migrant workers and tourists, providing temporary residence for migrant workers who are forced to stay in Shenzhen or those who just arrived in search for jobs. Thirdly on a more local scale, accommodating daily needs of public transport and recycling in the Dongmen commercial district.

50-53 **Empowering the under-privileged and the over-exploited**

Going back to the title of the thesis, how to empower the under-privileged? It could be achieved by using their own expertise, agricultural knowledge, by means of an urban farm. The urban farm ties up all the other previously mentioned programs, they work in a symbiotic relationship that the public transport interchange bring shoppers to the marketplace where the produces from the urban farm, while the kitchen waste collected from the commercial district can be treated at the recycling centre supplying organic fertiliser to the urban farm. The temporary residence is run on the financial support from the profit of the marketplace and also the hostel for tourists. This establishment could be a centre for new arrivals in Shenzhen, providing vocational training of hydroponic agriculture and accommodation while they can look for other jobs.

54-57 **Hydroponics and Vertical Farming**

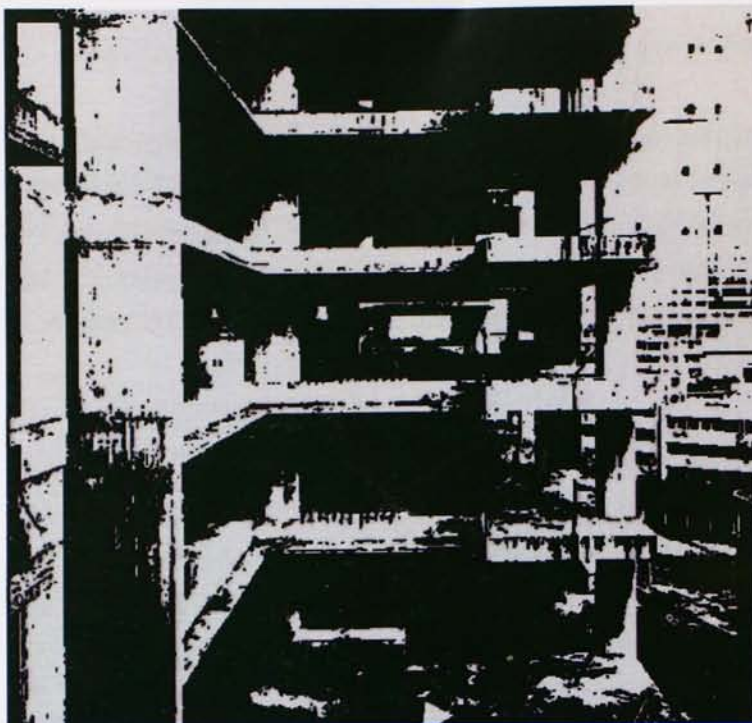
The conventional type of farm is not feasible on the tower due the required soil depth cannot be achieved on the original structure. Hydroponic farming is introduced to produce high economic value crops like fruits and flowers. Moreover, the skills required by hydroponic farming can be acquired by the migrant workers as vocational training.

58-64 **Parasitic Approach**

In order to maintain a ruin-like quality of the existing structure to create a "scar of greed" in the city, the design approach would partly retain the existing appearance and introduce the new programs as parasitic structures. Three parasitic operations: Attachment, Add-on and Intrusion were identified from a study of parasitic structures. In the preliminary design proposal, the growing area is applied an attachment on the southern facades with other programs such as residence punching through into the existing structure as intrusions.

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures

Issue - Global



Developer: Various
 Type: Mainly Residential, also Office and Commercial
 Scale: Refer to the map. The list is far from exhaustive, it gives a sense of the phenomenal scale of the incident. The 328 project listed below are reported by Hong Kong purchasers who had sought help from a political party in Hong Kong.

It was the real estate boom time in the **early 1990s** in the **Pearl River Delta Region**, yet numerous projects were left suspended during construction, several reasons can be identified, including financial shortage, land ownership dispute and problems related to structure and construction of the built structure.

In some cases, it is more suitable to categorise as **frauds** or cover for **corruptions** than speculation failure. At that time related legislations regarding property sales was not enough to protect purchasers, property presale allowed developer to raise capital apart from loans from banks, however there was little supervision and legislation regarding the sales system and gathered capital, leading to cases to double sales of the same development and embezzlement of the capital by dishonest developers. t

Guangdong Region Real Estate Bubble early 1990s

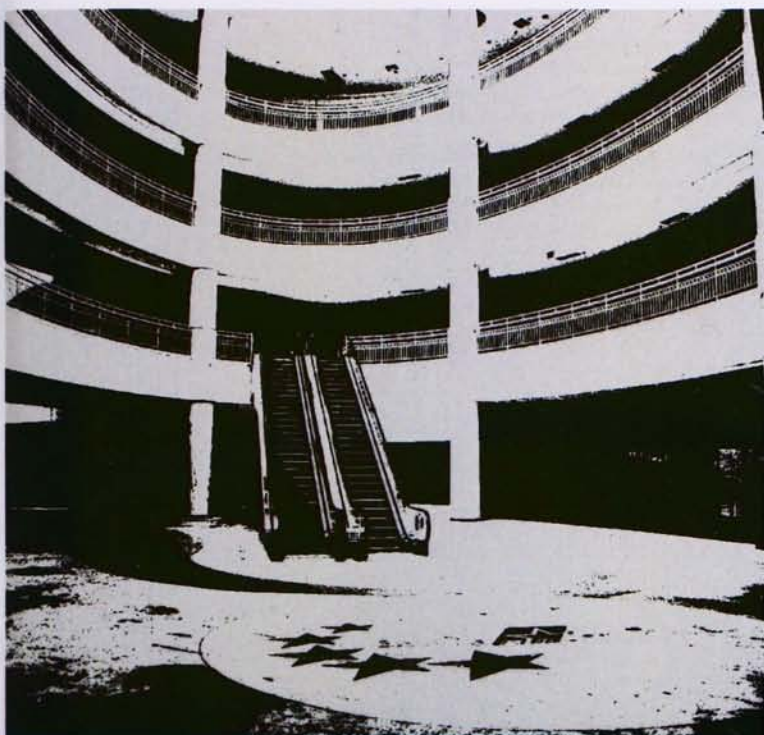
Theme parks, Japan mid 1980s-1990s



Developer: Various
 Type: Recreational
 Scale: Bankruptcies of several mega theme parks and numerous smaller ones as a result of a national wide economic meltdown

As a cultural symbol of the **Japanese Bubble Economy** in the 1980s, theme parks mushroomed during the economic boom, over 130 theme parks were built throughout Japan. **Series of bankruptcies** followed soon after the **collapse** of the bubble economy in the mid 1990s.

Summary on Significant Cases of Speculation Failures II



Developer: Dong Guan San Yuan Ying Hui Investment & Development
 Type: Commercial, Recreational, Hotel, Residential and Office
 Scale: The whole development covering 430,000 sqm of suburban area in Dongguan, the shopping mall itself contains 890,000 sqm of floor area making it the largest shopping mall in the world

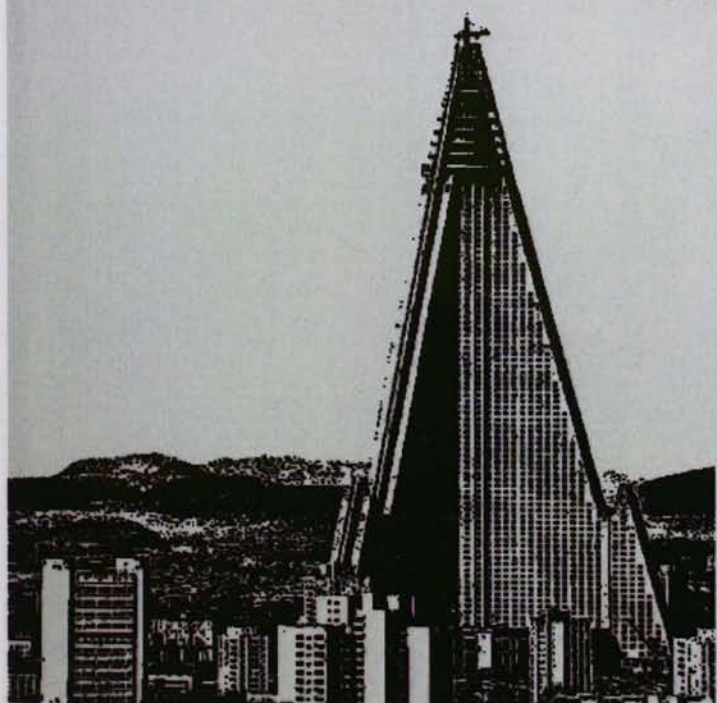
Since the opening in 2005, the **theme park styled shopping mall** which is the **world's biggest** in terms of gross leasable area, remained largely empty, expected tenants and crowds just did not turn up.

Causes to its failure include the very fundamental issue, the location of the mall, located in the **suburbs**, the **accessibility** of the mall is reduced; also there's **no agreement with potential tenants** at early stage of the development, the lack of anchor store in the mall is one of the reasons of its low occupancy.

Perhaps the diversity of the development keeps it running till today, by the end of 2006, the mall was acquired Beijing Peking University Resource Group at CNY 2 billion. As a strategic point in expanding its real estate development in the PRD region, Beijing PURG has been **restructuring and rephasing** South China Mall since the acquisition.

South China Mall

Ryugyong Hotel, Pyongyang- North Korea 1987-1992 (unfinished)



Developer: State Initiated
 Type: Hotel
 Scale: A 105 storey, 330m high hotel containing 360,000 sqm of floor space, including 3,000 hotel rooms

With its various nicknames such as "The Worst Building in the History of Mankind" or "Phantom Hotel", The Ryugyong Hotel was reported as a response to the completion of the Westin Stamford Hotel (currently Swissotel The Stamford) in Singapore constructed by a South Korean Contractor, which was the tallest hotel in the world upon completion in 1986. The North Korean government envisioned the project as a **manifesto of national power** and a way to bring in foreign investment, and the construction of the hotel started in 1987.

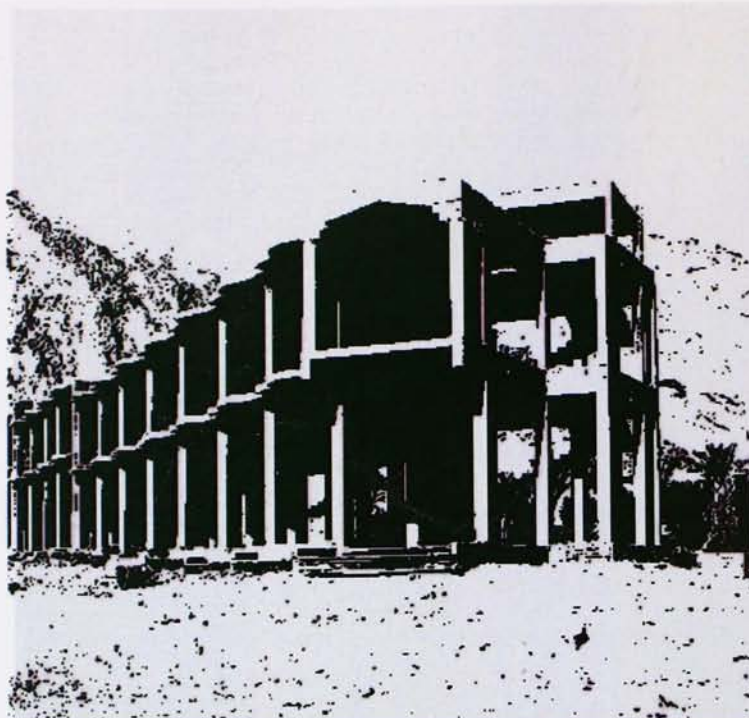
The concrete structure was completed in 1992 but the construction was suspended since then. According to various sources, the reason behind the suspension was most probably **financial difficulties** faced by the North Korean government when the economy was hit by a prevailing **famine**, there are rumors that the structure is actually structural unsuitable for occupation due to the **substandard concrete** used in construction. It would cost up to USD \$2 billion to finish the hotel and make it safe, according to estimates in the South Korean media.

In May 2008, there was news about the **resumption** of construction by Egypt's Orascom group on the top floors of the hotel. An official with the group confirmed its Orascom Telecom subsidiary was involved in the project but gave no further details.

Italian Architecture and design magazine Domus has jointly organised a public consultation with the Department of Architecture and Society at the Milan Polytechnic in 2005, concerning the completion and functional redefinition of the Ryugyong Hotel, receiving over 100 entries.

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures

Issue - Global



Sinai Peninsula – Egypt 1999-2004

Developer: State Initiated
 Type: Hotel, Recreational
 Scale: Exact figure is not available, however according to various sources, number of projects involved is believed to be on a regional scale

Over the past 30 years the Sinai Peninsula has become a tourist destination due to its spectacular natural beauty, rich biblical history, and proximity to Israel. Continuing growth was anticipated and investments were poured into several **state-funded** tourism projects. Possible reasons for leaving these "**monuments to failed investment**" include: problems related to financial difficulties and **terrorist attacks** in the area.

The Adelphi, London - UK 1768-1773



Developer: William Adam & Company, Robert Adams
 Type: Residential + Industrial (warehouse at the vaults)
 Scale: A block of 24 unified terrace houses on a 13 200sqm site located between The Strand and the River Thames, measuring 120 x 110m.

The architectural design of the Adelphi was a bold one considering the location and site area, the Adams' ambition to transform the derelict district into a fashionable residential area and the architectural solution of the terrace to deal with the sloping site and periodic flooding from the Thames. However the financial side of the scheme was much less considered; The Adams expected the vaults be to let to the Government as Ordnance Stores, yet **no contract** of such **was guaranteed**. Other agreements and **approvals** from former freeholders and authorities were **not confirmed** before the construction works were commenced in 1768.

Although the expected revenue from the Adelphi was plausible, yet the **banking crisis** occurred in 1772 had brought the financial market in the Great Britain to its knees. With the lack of finance and under-estimated construction cost, to keep the project ongoing was proven to be far beyond the resources of the developer.

1768
 Lease acquired for the "Adelphi" (adelphi, meaning brothers in Greek) development in the Strand, London. To include: Adam Street (east), Robert Street (west), John Street (north). Work began on site in the same year.

1772
 Work suspended on the Adelphi project through lack of finance due to an unexpected banking crisis in the Great Britain causing bankruptcies of banks and patrons of the Adelphi.

1773
 A **lottery** was promoted to **raise fund** for the remaining construction cost of the Adelphi, which was approximately £200,000. A total of 4,370 tickets at the value of £50 each were issued, the prizes consisted of the houses, shops, warehouses and vaults in the Adelphi not already sold, and a few houses in Queen Anne Street and Mansfield Street, as well as a collection of pictures and other works of art, some of which were the Adams' own collections.

Summary on Significant Cases of Speculation Failures I



Canary Wharf, London – UK 1988-1991

Developer: Olympia and York
 Type: Office + Commercial
 Scale: A 336,000 m² site including One Canada Square, Britain's tallest skyscraper.

Situated at the London Docklands, the Canary Wharf is built on the old West India Docks Britain on the Isle of Dogs. The London Docklands was an example of obsolete over time with advancement of the shipping industry. Following the resurgence of prosperity in the 1950s from the massive damages during WWII, the widespread of containerisation from 1960 to 1970 had speeded up the closure of the docklands as it was not able to handle much larger container vessels due to geographical limitations.

During the 1980s, the London Docklands Development Corporation and several banks had come up with the idea of turning the Isle of Dogs into a **new financial district** in London, offering larger floor-plate and open plan office space with the proposed office towers. Olympia and York signed the Master Building Agreement with the London Docklands Development Corporation in 1987 and construction began in the following year.

However in the early 1990s, the London commercial property market entered a **recession**, plus the extension of the London Underground Jubilee line to the Canary Wharf was not started yet, British firms were unwilling to relocate from the traditional financial centre within the City, causing the office space at Canary Wharf remained largely empty. At the same time, the U.S. real estate market began a deep recession, causing **cash flow difficulties** to Olympia and York and eventually forced this once powerful developer into bankruptcy.

Bangkok – Thailand late 1990s

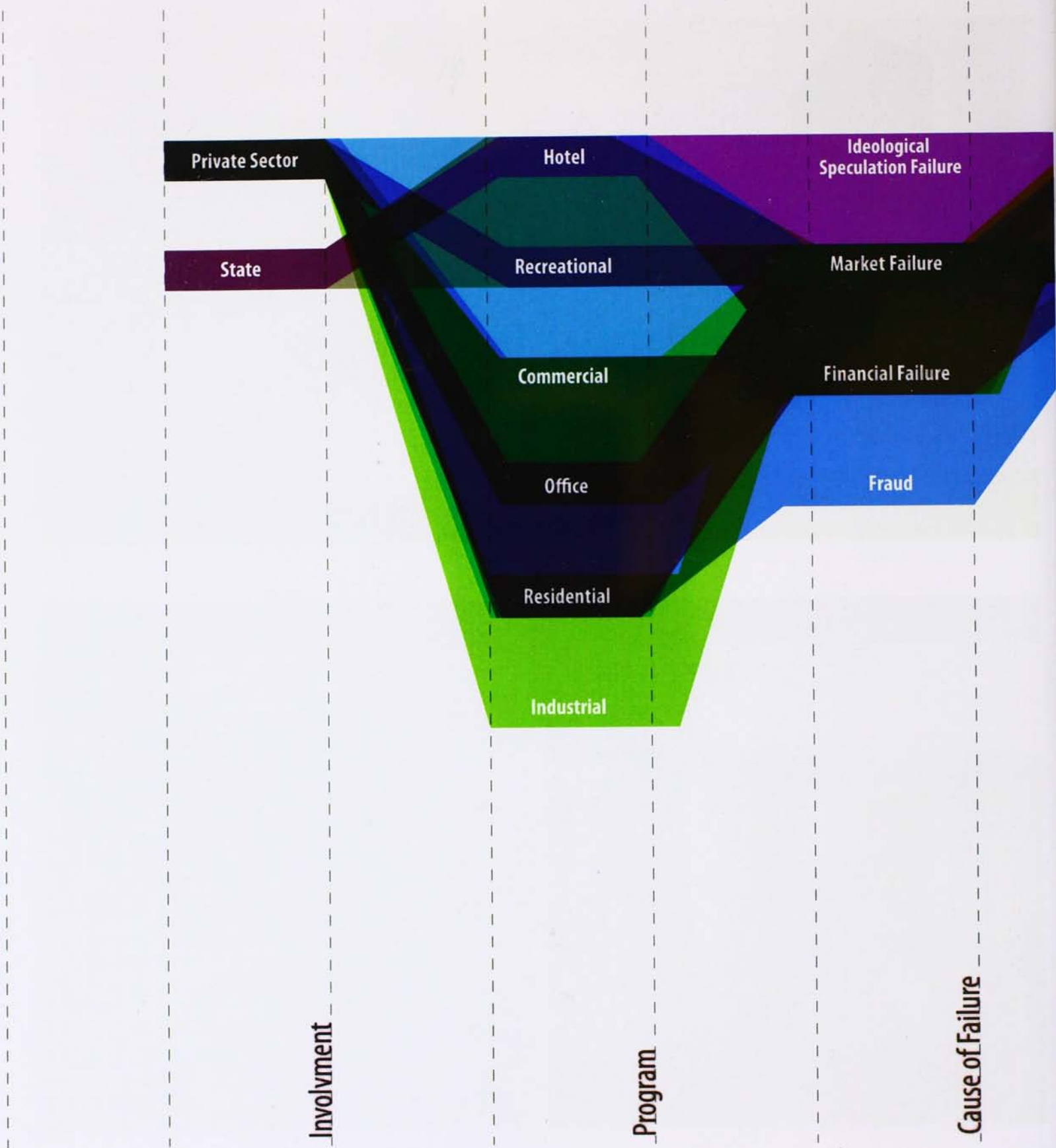


Developer: Various
 Type: Office / Residential
 Scale: 508 Suspended projects with a total of app. 10.9 million sqm
 Over 300 building projects with 10+ storeys on hold

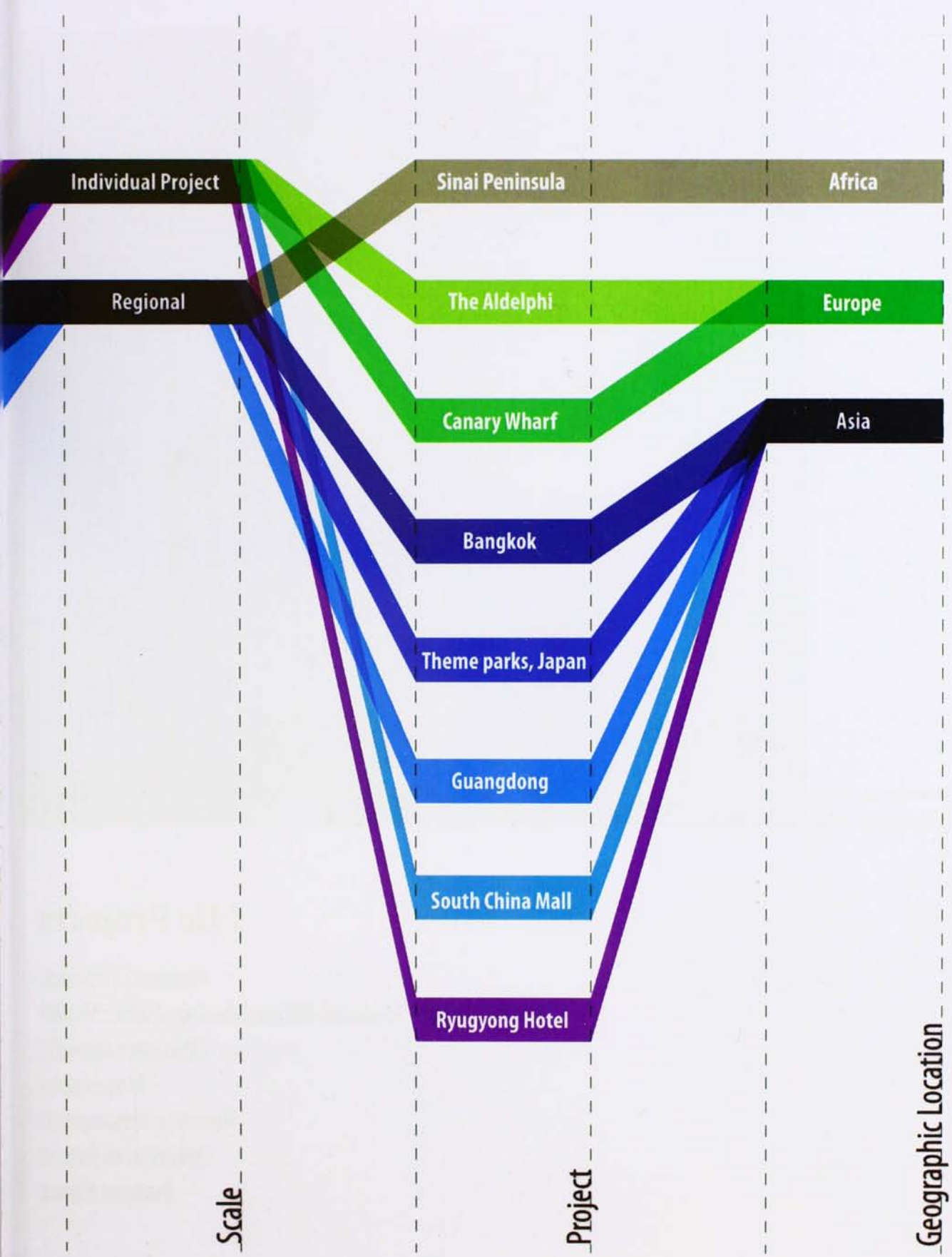
Following economic boom time from 1985 to 1996, the **financial crisis** in 1997 triggered by massive speculative attacks on the Thai Baht has devastated Thailand's economy, especially in the finance, real estate and construction sector. According to a survey released in August 2003 by the Thai Government Housing Bank (GHB), there were **508 unfinished major buildings** in Bangkok with approximately 10.9 million sqm of floor area, including over 300 buildings with 10+ floors.

Since 2001, Thailand's economy has started to recover and demand of office space and residential unit soon outgrew the supply. **Resuming suspended projects** appeared to be more efficient to **response to market demands** than commencing new projects. By the end of 2003, GHB found that 24 per cent of the suspended projects in the central Bangkok area had been reinvested in and out of that number, 61 had been completed. According to another study conducted by property consultant Jones Lang LaSalle in early 2004 which concentrated on suspended office and condominium highrise projects, several office buildings has resumed while more were expected to follow. 5

There are also a number of highrise office development projects that had been suspended and then resumed construction for an **alternative use** such as serviced apartment and condominium. On the contrary, suspended apartments and condominium projects had seen little resumption due to more complicated debt restructurings compared to office buildings. As usually most of the apartments were sold in residential projects, as a result the flat-owners became creditors and dealing with a large number of creditors can be time consuming which made the resumption difficult.

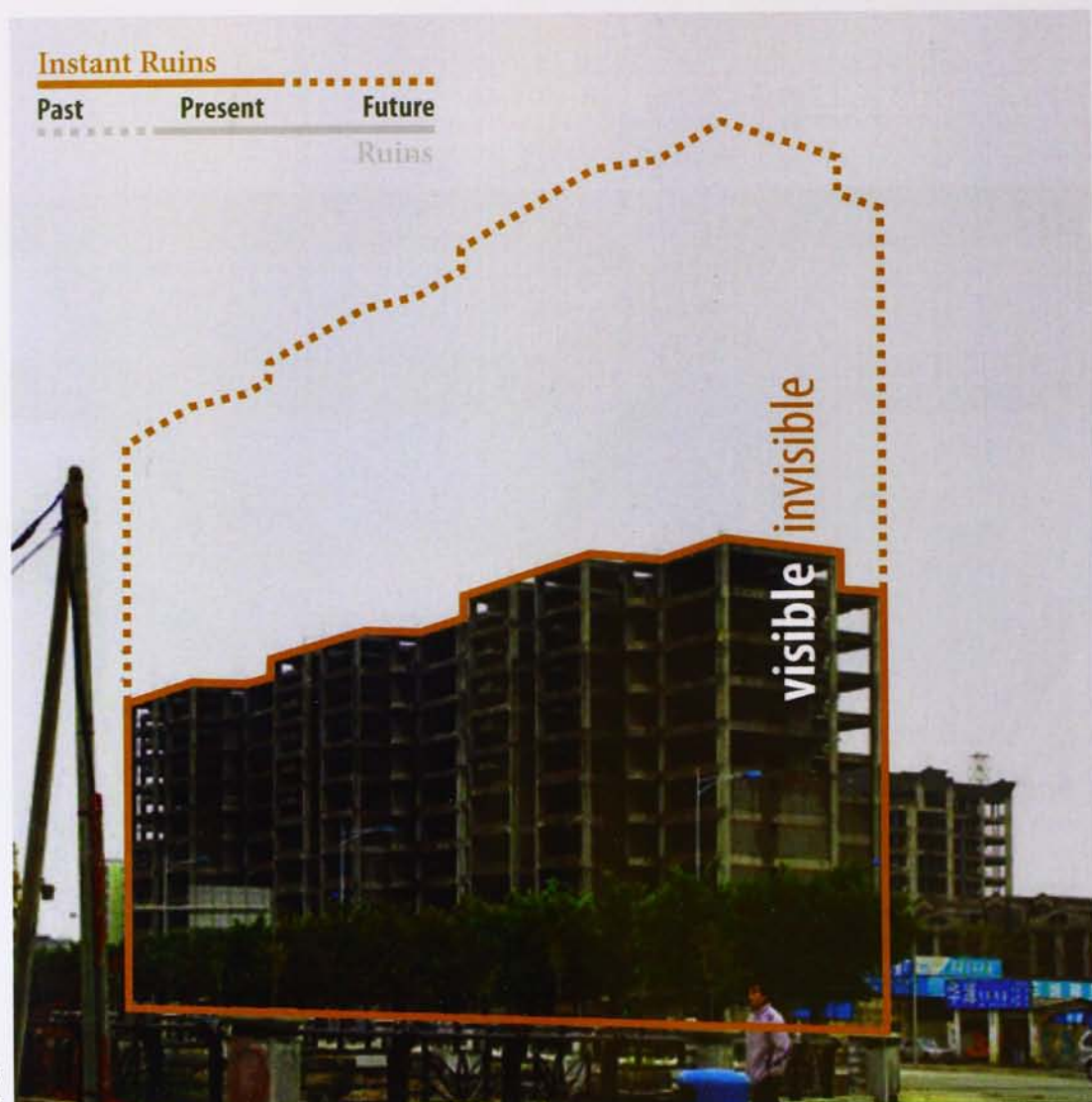


Analysis on
Significant Cases of Speculation Failures



Legend
The darker the area, the higher the frequency

Issue - Significance / Uniqueness



Idle Projects

Absence | Presence
 Market Failure/Financial Failure/Ideology Failure/Fraud
 Obsolete overnight
 Suspension
 Recovery/Resumption
 Prophetic of Future
Instant Ruins

Similarity and difference between ruins and idle projects +
 Introduction to Instant Ruins

Instant Ruins

Past Present Future
Ruins



Ephesus, Ankara, Turkey

Ruins

Absence | Presence

Natural disaster/War/Depopulation

Obsolete over time/overnight

Decay

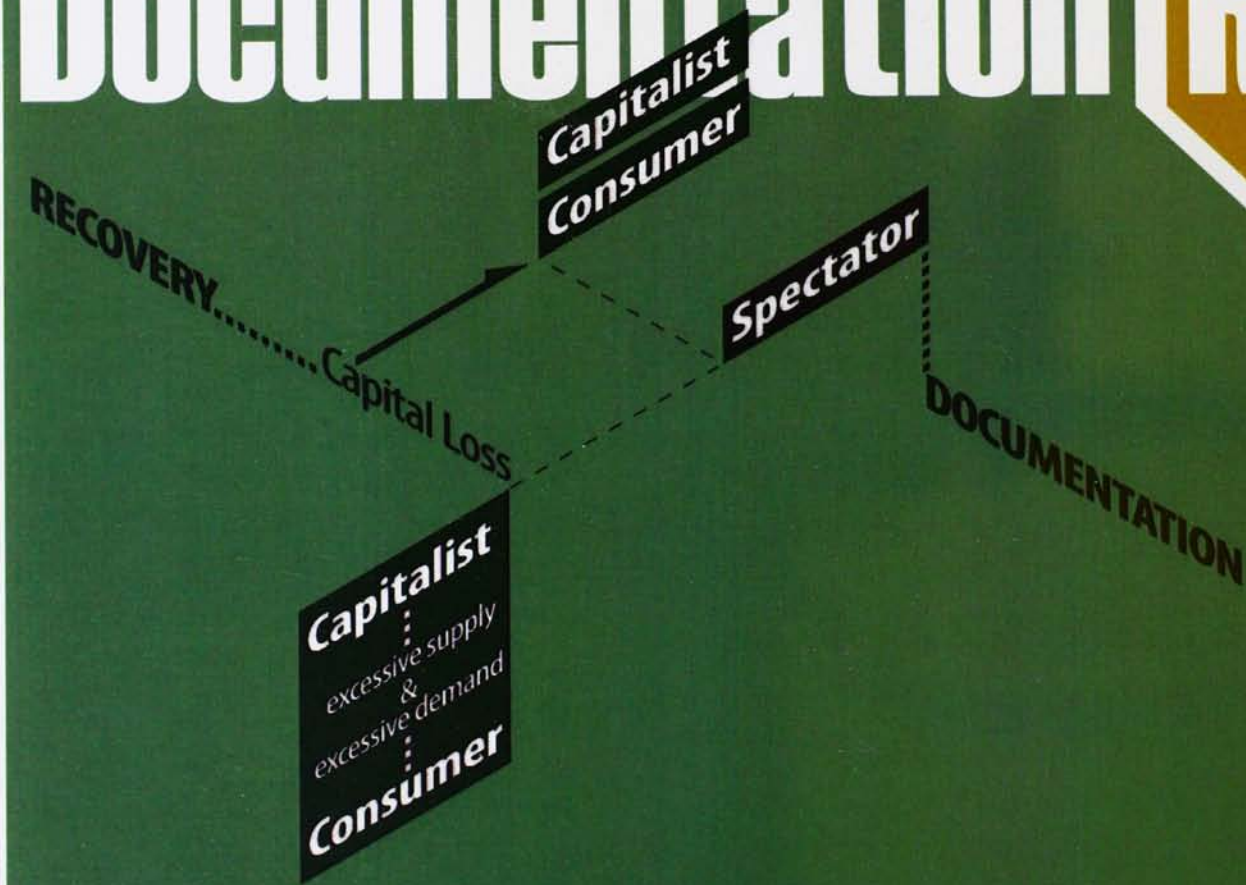
Conservation

Reminiscent of Past

Remain ruins

Recovery and Documentation

Back- Normal Recovery



Rehabilitation As A Role Play
 - Analysing from Available View Points

to-
al
very

Hatred- Embedded Recovery

Victims

...Destructions

Nature

Victims

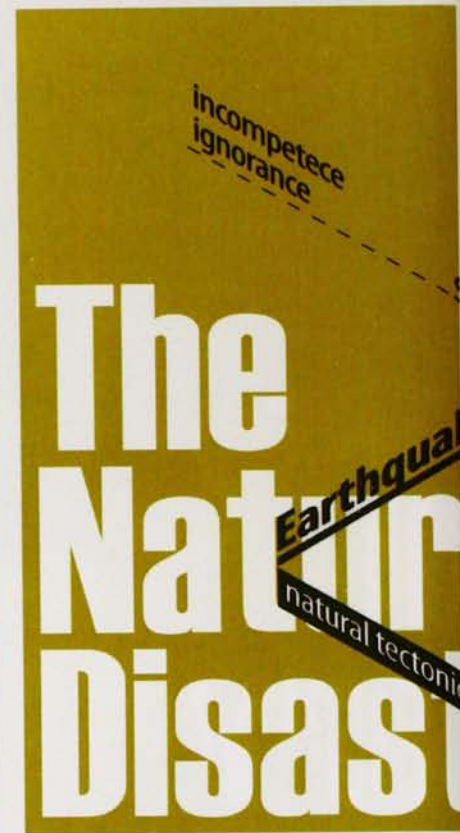
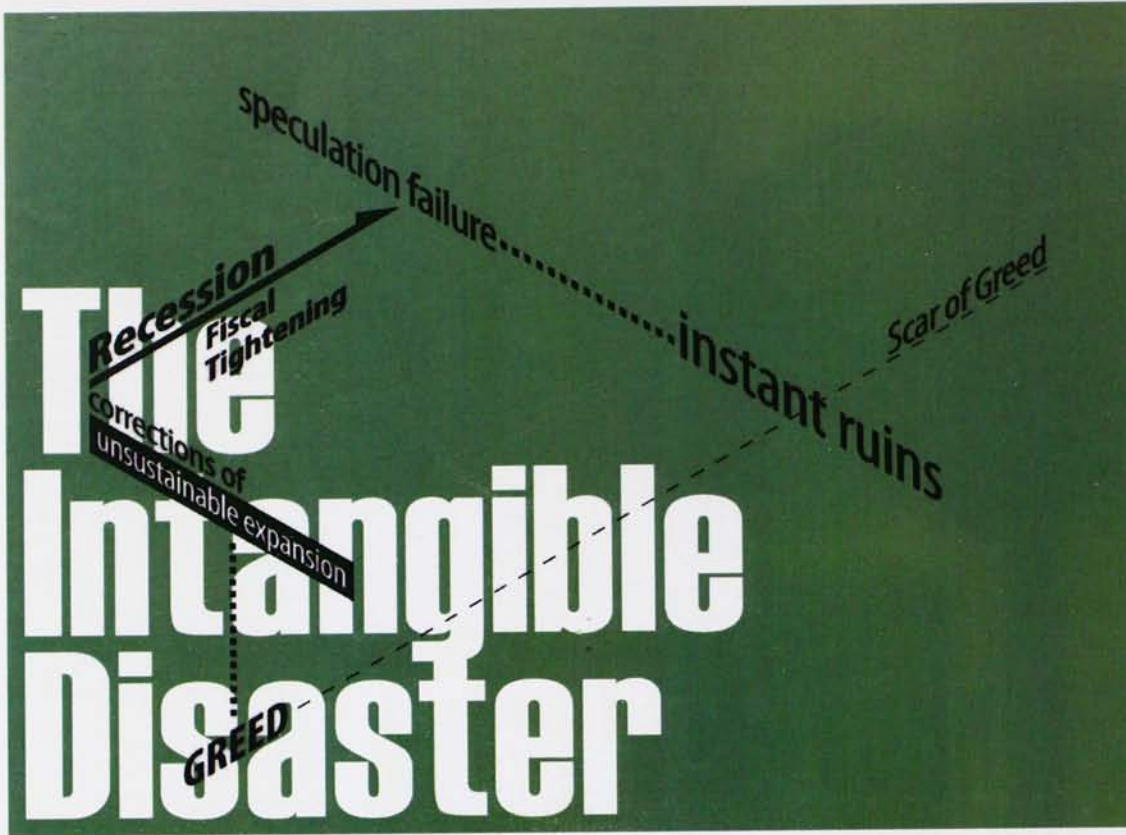
RECOVERY.....

Destructions

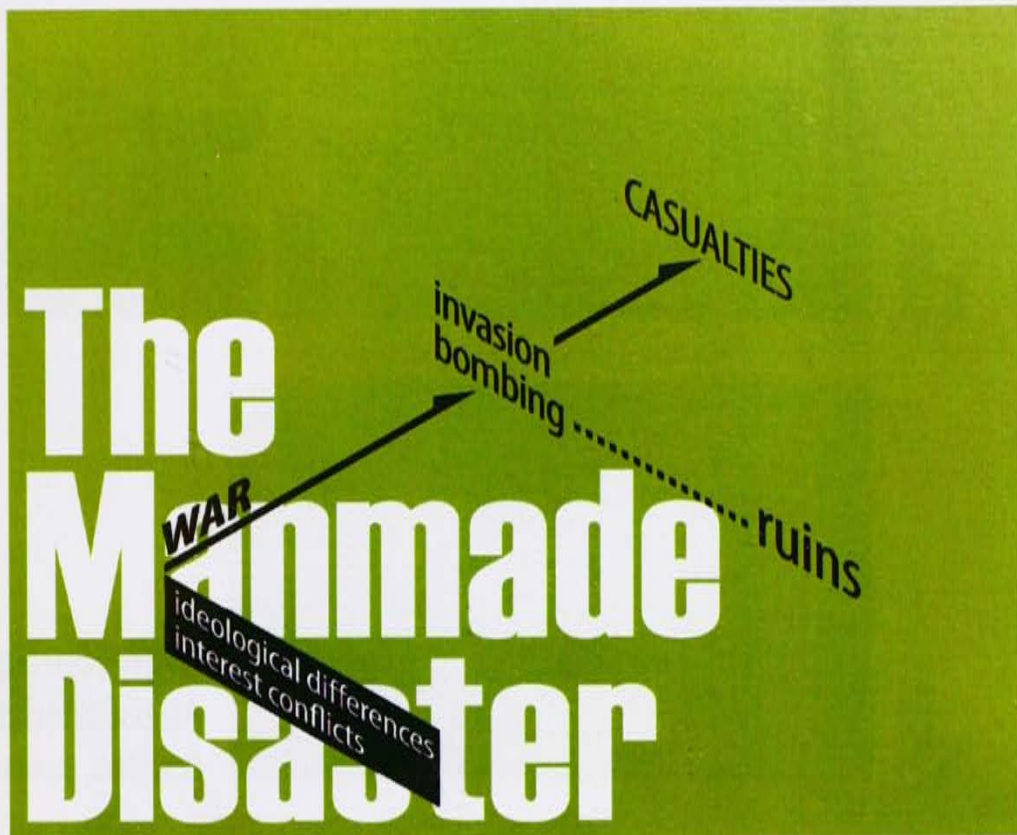
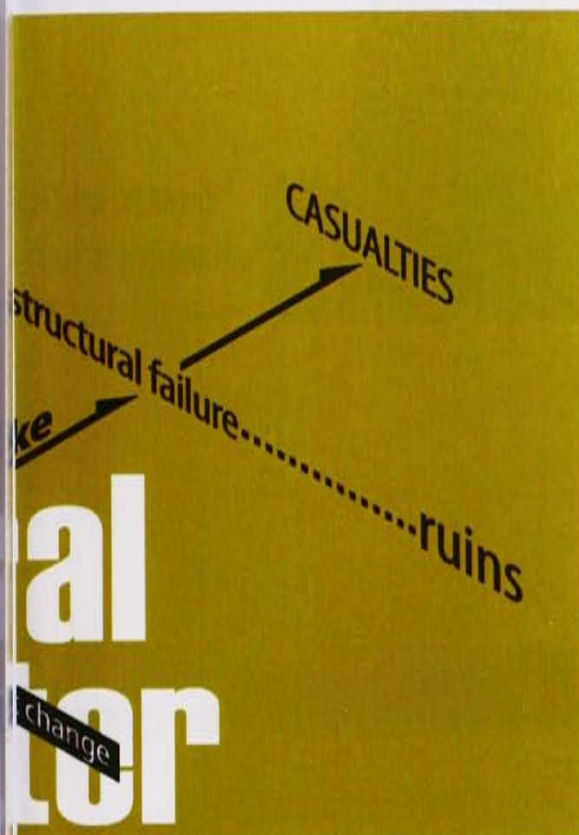
Aggressor

Hatred.....

MEMORIAL



Analysing The 3 Types of Ruins Creating Disaster



Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
 Issue - Reusing, Resumption, Revitalisation

on
SKIN



"Castle of Pu"
 Turning a half
 Guangzhou, China

on
SPACE



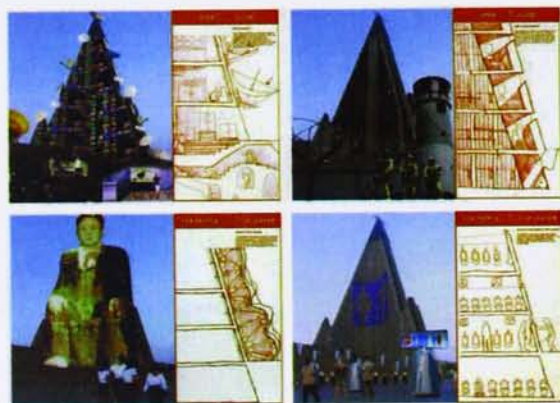
High-rise Squats

Abandoned office and residential towers invaded by
 Bangkok, Thailand

on
IDEOLOGY



on
IDEOLOGY
on
SKIN
on
SPACE



**On Possibilities / Alternatives
 of Revitalising Idle Projects**

iblicity"

-built residential project into a 10,000 sqm billboard, named by local authority

ia

y Burmese refugees and migrant workers

XL Canvas

Taking idle concrete structures and the underlying ideology as sets and stages

Various Cities, China | Artist: Ko's Brothers, Another mountainman



Ideas Testing Ground

Call for ideas on revitalising Ryugyong Hotel, challenging its form, political symbolism...

Pyongyang, North Korea | By *Domus* magazine

Source

- www.lw.gov.cn 广州荔湾区政府网
- Issue 11, Volume 02, *Monocle*, March 2008
- Issue 893, *Domus*, June 2006

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Regional

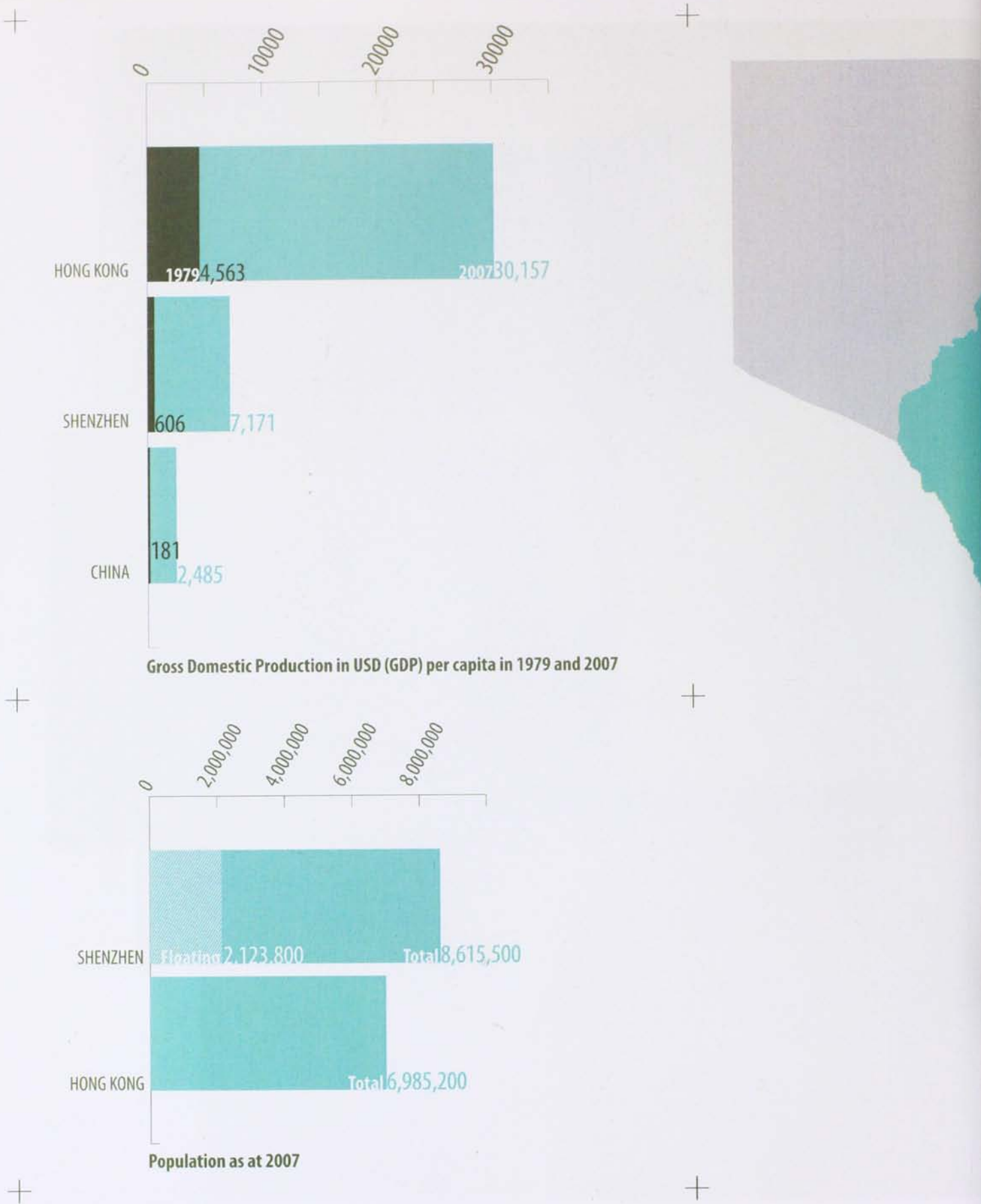


Reported Idle Projects since 1990s + Shopping Malls listed on the Top 10 Biggest in the World in Guangdong Region



Legend

- Abandoned Residential Project
- Abandoned Commercial Project
- Shopping Mall listed on the top 10 Biggest in the World



Shenzhen Speical Economic Zone (SEZ)

A Symbiotic Analysis



Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures

Issue - Regional

As the **hinterland** of the Hong Kong metropolitan area, the Guangdong Region has been providing relatively **low-cost produces and consumer products** despite the ongoing political debates before 1997.

The "**Hong-Kongism**" first adapted by rec provide Hong Kong consumers with a "**famili**"

Following the Guangdong holiday home trend, **cross border recreation provided a low budget alternative to Hong Kongers**, recreation and catering industry flourishes especially in Shenzhen, owing to its proximity to Hong Kong

THE HOUSING BUFFET

- ▶ start of the gradual change from **state housing provision to private housing development**
- ▶ introduction to ideas of **private property ownership and housing as commodity**
- ▶ mostly **luxury** housing in **imperial grandiose styles** targeting **Hong Kong holiday home purchasers**
- ▶ price remained largely **unaffordable to locals**

THE ICE AGE

- ▶ **recovery period** of economy, fina Guangdong Region
- ▶ **real estate speculation concent**
- ▶ **Political uncertainty** in Hong Ko

THE FISCAL TIGHTENING

- ▶ financial measures introduced by the Chinese Central Government from the 3rd quarter 1993 to **mitigate the excessive real estate speculation**
- ▶ funds drained due to tightened financial env leading to numerous **abandoned development** and thus **lan wei lou**

Shaping of the Hong Kong Style Sign Consumerism + Property Market Development in the Guangdong Region

reational and catering industry to
ar" environment

The **"One Country Two System"** maintain the
living standard difference across the border even after 1997

The **"Hong-Kongism"** transformed and **localised as consumerism signs**,
as Hong Kong has long been a "wonderland" to Guangdong people

1996
1997
1998
1999
2000
2001
2002

financial and property market in the
ated on the Hong Kong Market
ng

THE REVIVAL

rise of buying power of PRD locals

Hong Kong buyers **regained confidence** by the
involvement of big names Hong Kong developers

Hong Kong buyers mainly middle/low income class
who have work or family ties in Guangdong

1997 FINANCIAL CRISIS

- ▶ triggered by massive speculative
attacks on asian currencies
- ▶ big hit to **Hong Kong**
real estate market

THE CHANGE

rise of local middle / professionals class

main buyer group shifted gradually from Hong
Kongers to locals

change in property marketing strategy from
mimicking Hong Kong more localised taste

ironment
ts



Location of
Dongmen Commerical District and Dongmen Building

Longgang



Yantian



Luohu

Legend:

Scale: 1:1500@A1

 Dongmen Commercial District

 Metro Exit

 Shenzhen Metro Line 4

 Intercity Railway

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Case Study



Hong Kong

N

"Live in Gango.

A rough translation of the original name to *Gangou No.8* - Gango adding sign value to the



si

Kolwoon City F

Obviously it is not located in Hong Kong but like many other locations such as *Mongkok Shopp* they provide Shenzhen

Observations on Sign Consumerism
in Shenzhen

signifying higher social status

Fortune

Macau

"No.8, Be a Shenzhen-Hong Kong White-Collar"

The advertising slogan appeared on the hoarding around the construction site: of *Dongmen Building* - a name just referencing its location in the city. The 'u' meaning Hong Kong Macau and the 8 is an auspicious number to Chinese, presenting the residential project as a commodity.

signifying style/trend

Food Court

located in Kowloon City in Hong Kong (written in simplified Chinese), the shopping malls, shops and restaurants named with places in Hong Kong, such as *Wing Centre* or *Causeway Bay Restaurant*, attract consumers with signs of Hong Kong as they fantasise Hong Kong to be more stylish and prestigious.

Image source
<http://sn.8jee.com/>

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Cultural



THEME PARK

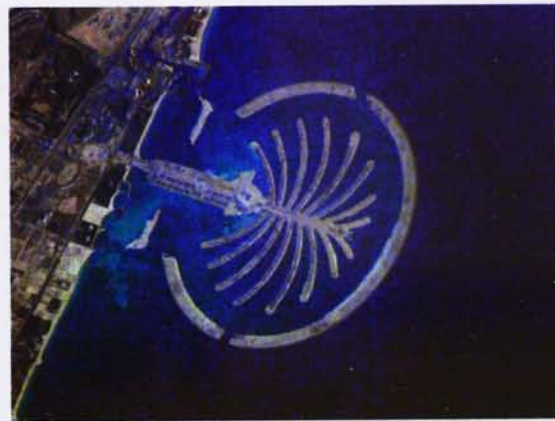


SHOPPING MALL /
FLAGSHIP STORE



The
bran
amb
Louis

HOTEL / RESORT



Anit-Reality Env
architectural symt
countering notion
Banyan Tree Lijiang, L

HOUSING



Architectural Simulacra -
Types Most Susceptible to
Sign Consumerism



「去迪斯尼太运 到石景山游乐园」

themes parks featuring miniatures of renowned architectures

theme parks recreating specific era and places

theme parks recreating another theme park

台灣桃園小人國 | 台場小香港, Tokyo, Japan | 中國北京石景山游乐园

Home Base / Forefront of Consumerism

and name as the sign of prestige and social status

ambiguity between theme park and shopping malls

Louis Vuitton Flagship Store, Central, Hong Kong | Canal City Hakata, Fukuoka, Japan

Environment/ As Extensions of Theme Parks

tools of tradition and authenticity

loss of reality

Wangjiang, China | Palm Jumeirah, Dubai, UAE



「清幽如画的人间仙境，显赫富豪的梦想宅第」- 湖景山庄

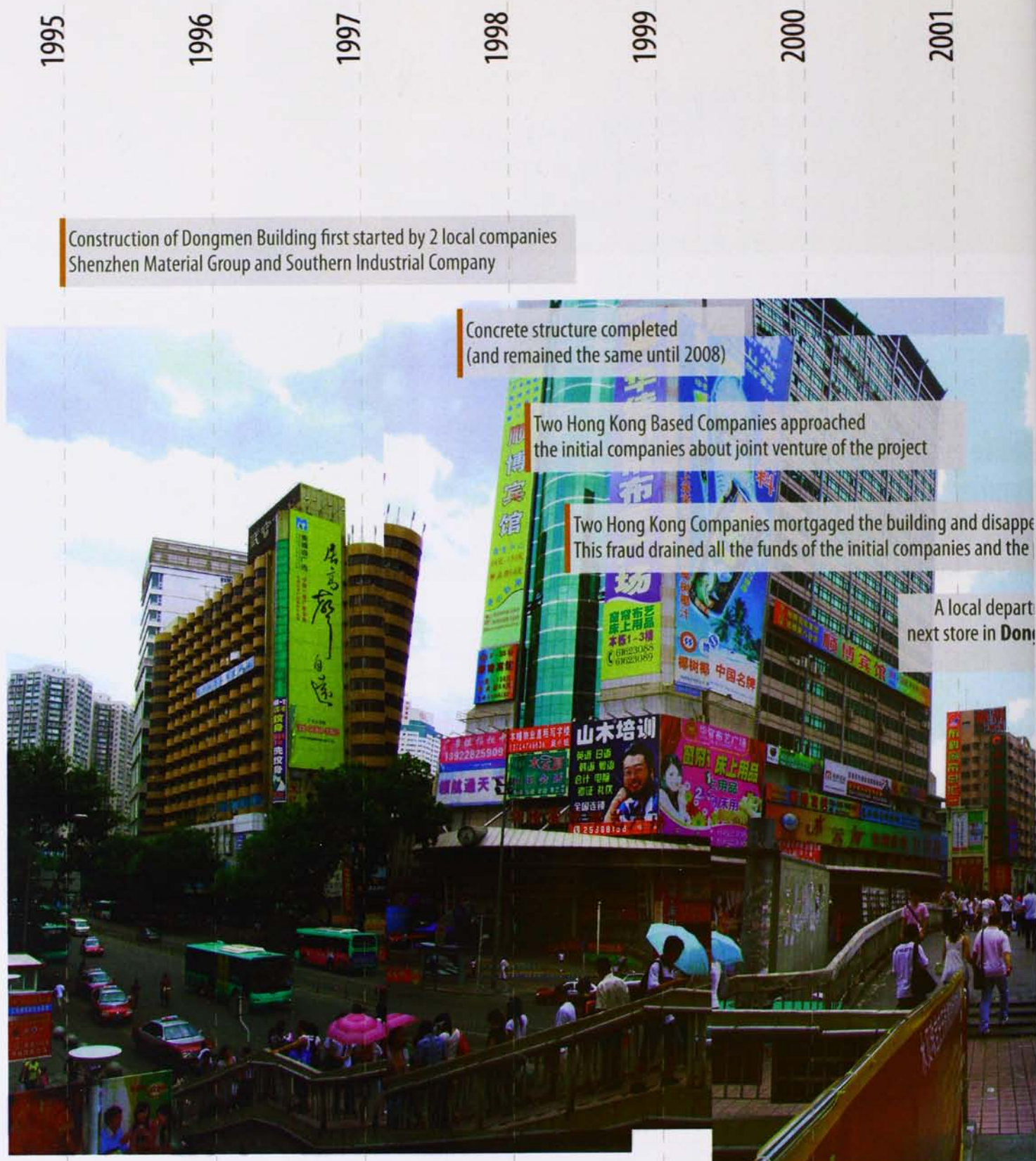
"mood images" - imperial grandeur, taste, lifestyle, international symbols

instead of images of the real apartment buildings / houses

Various Residential Project Advertisements, China

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures

Issue - Case Study



A Brief History of *Dongmen Building / Gangao No.8* - the Reincarnation of an Idle Project with 2 Alias

2002

2003

2004

2005

2006

2007

2008

2009

Shenzhen Government and Shenzhen Planning Department publicised policy on dealing with idle project in Shenzhen, expecting to revitalize all remaining idle projects in 3 years

Completed with the loan
project entered idle status

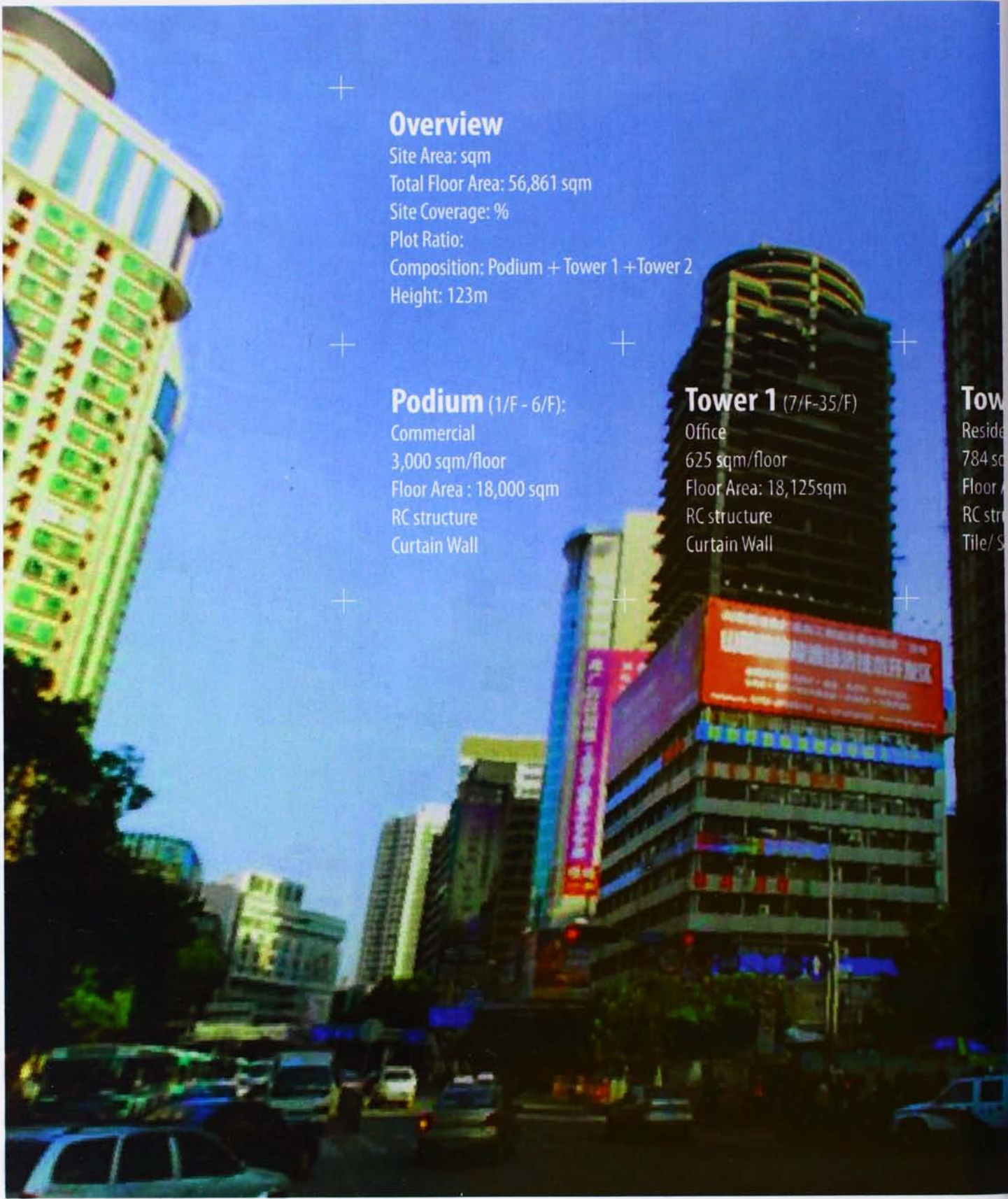
Department store chain, Haiya Department Store, was reported to be opening their
Dongmen Building, taking the entire floor space of 33,000 sqm from 1/F to 6/F
Dongmen Building was remaining idle at that time

Resumption of construction observed on site with a new project name **Gangao No.8**,
however information shown in the hoarding about the developer, contractor and
property agency cannot be verified (possibly second fraud?)



Source

深圳商報·深圳特區報·
明報(香港)·香港文匯報



Overview

Site Area: sqm
 Total Floor Area: 56,861 sqm
 Site Coverage: %
 Plot Ratio:
 Composition: Podium + Tower 1 + Tower 2
 Height: 123m

Podium (1/F - 6/F):

Commercial
 3,000 sqm/floor
 Floor Area : 18,000 sqm
 RC structure
 Curtain Wall

Tower 1 (7/F-35/F)

Office
 625 sqm/floor
 Floor Area: 18,125sqm
 RC structure
 Curtain Wall

Tow

Reside
 784 sq
 Floor A
 RC stru
 Tile/S

Dongmen Building - the Twin Towers
Estimated Project Details



er 2 (7/F-33/F)
ential
m/floor
Area: 22,736 sqm
ucture
tone Cladding Finish

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Case Study



--- The Luckier Twin

--- Completed vs Idle

Dongmen Building - the Twin Towers
Close-Ups



Blending in

Expected vs Existing

Adaptions

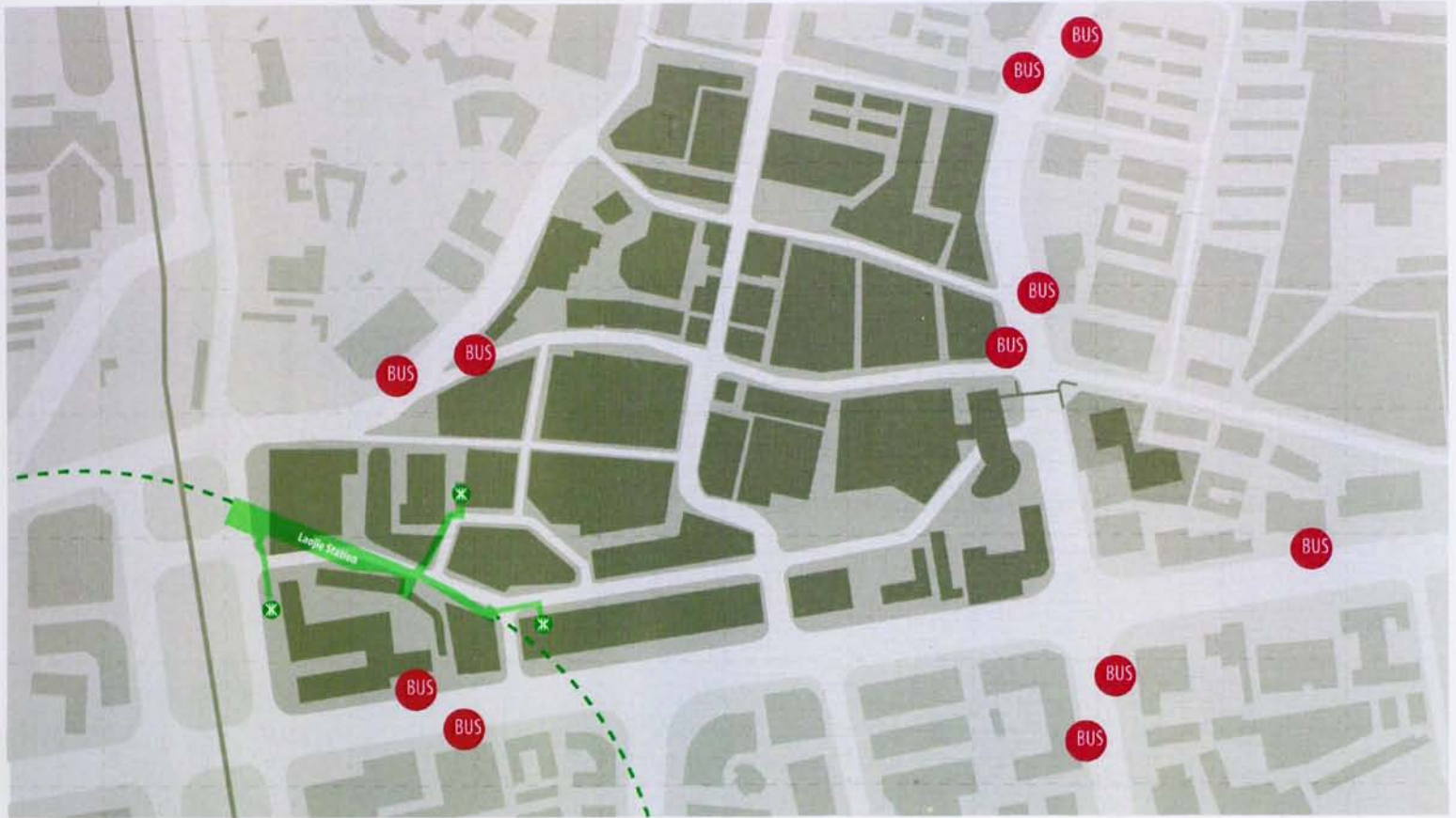


Legend:

Scale: 1:3000

-  Major Vehicular Access
-  Limited Vehicular Access
-  Pedetrian Area

Site Analysis - Dongmen Walking Commercial District
Circulation and Public Transport



Legend:

Scale: 1:3000

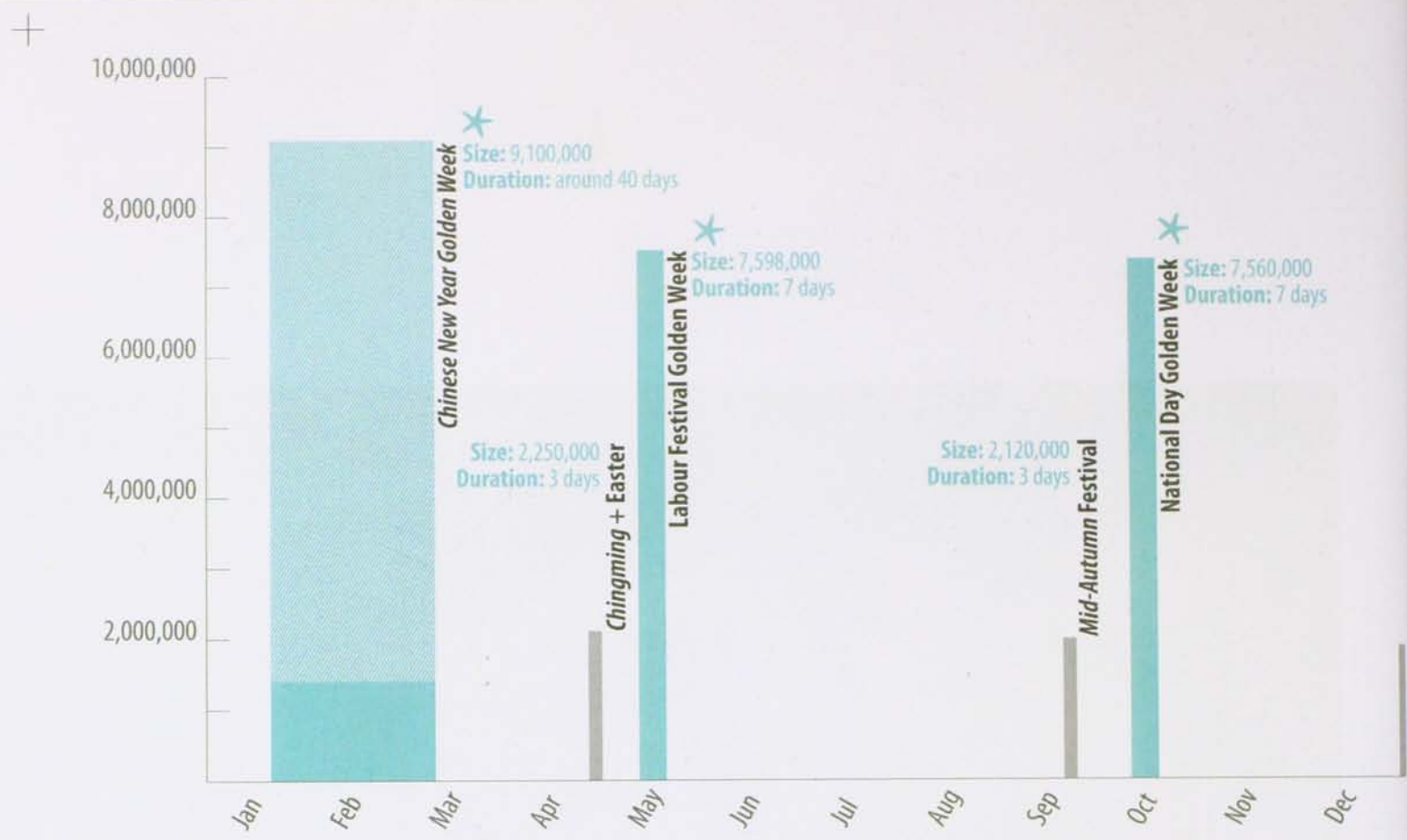


Metro Exit

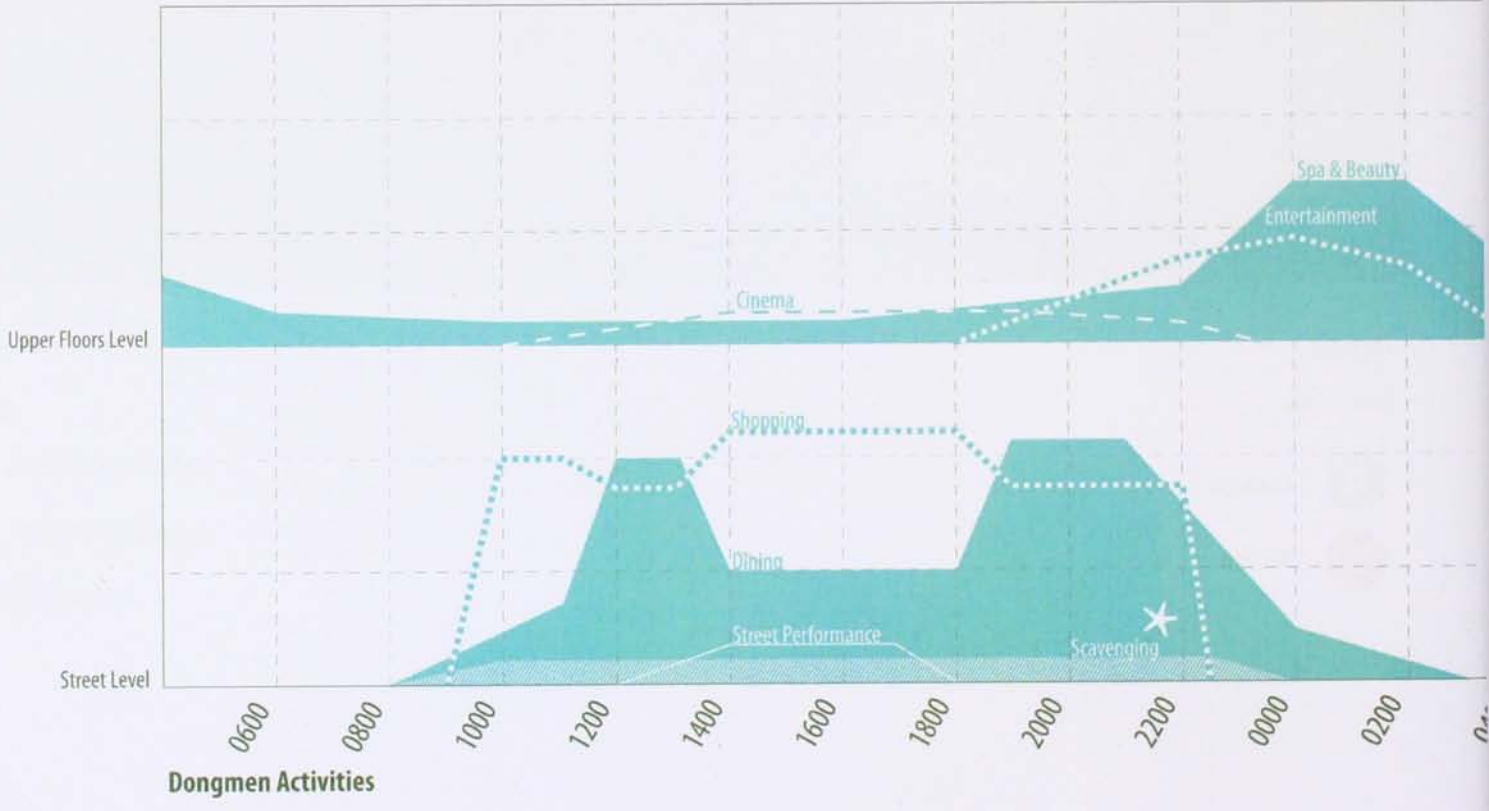


Bus Stop

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Reusing, Resumption, Revitalisation



Shenzhen Significant Seasonal Influx-Exodus



Shenzhen - the Transient City
in Scale and Time

In Response to the Transience...

- SZ floating population
- SZ residents + tourists from other parts of China
- HK residents
- ✱ Possible intervention

Provides a *Host* for *Temporary Intervention* over a period of *several years*

Abandoned Structures

Regional Economics
Periodic Fluctuation

Provincial Demographics
Perennial Influx/Exodus

Local Livelihood
Quotidian Activities

Buffer for
Residual Floating Population

temporary residence/hostel
workforce market

Daily Programmatic Needs

Solutions for
Traffic/Parking & Urban Scavenging

transportation hub
recycling centre

Christmas Holidays
Size: 2,000,000
Duration: 4 days

Jan

✱ Possible intervention

Q4

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures

Issue - Case Study



^ public vehicular access to Dongmen walking district are limited to its peripheries except the metro station on the southeastern side

> recyclable waste from shops are collected and gathered on streets



Responding to Dongmen's Local Needs

Possibilities for Architectural Programming



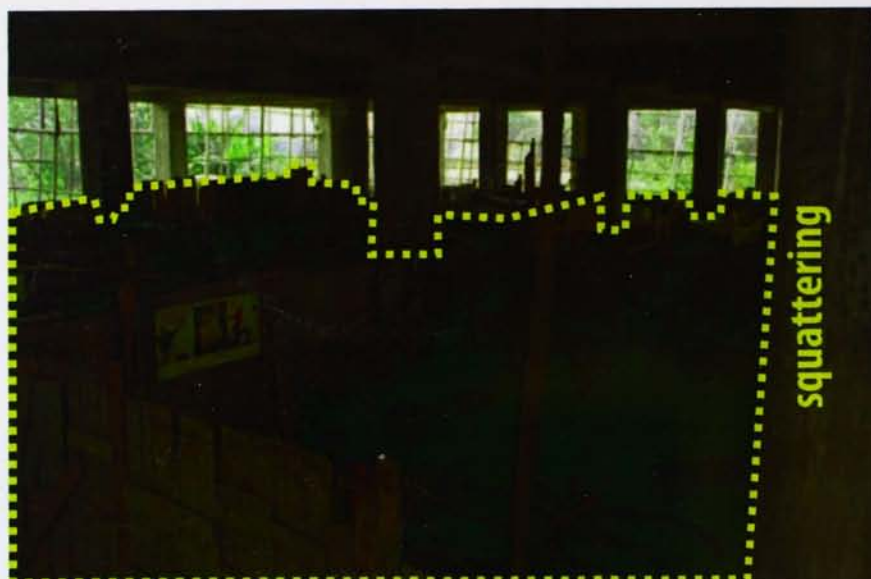
kitchen waste disposed right
in front of restaurants



sorting of recyclable waste carried out
directly on streets

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures Issue - Case Study

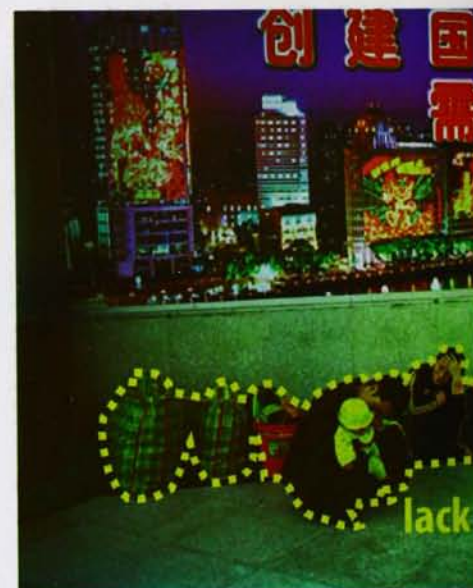
ineligible to state housing without a local *hukou*,
squatter in abandoned structure happened to be a popular
alternative accommodation for migrant workers



mostly employed for low sl
migrant workers are prone to



migrant works not getting a train ticket home
during the home-coming peak season
before the Chinese New Year



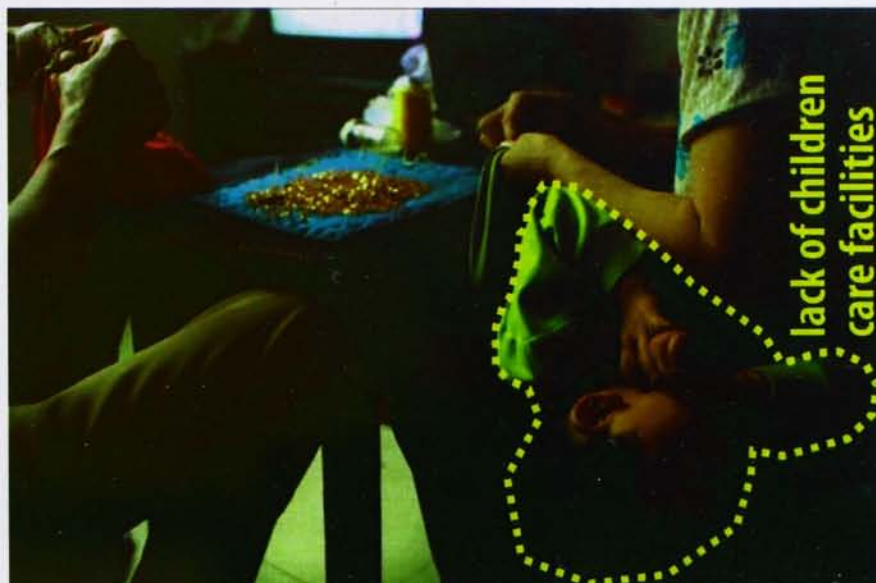
new arrival
looking for empl

Responding to the Migrant Workers' Needs - Possibilities for Architectural Programming

kill jobs earning petty wages,
undesirable living conditions



children of migrant workers are either unattended
or left in their home provinces



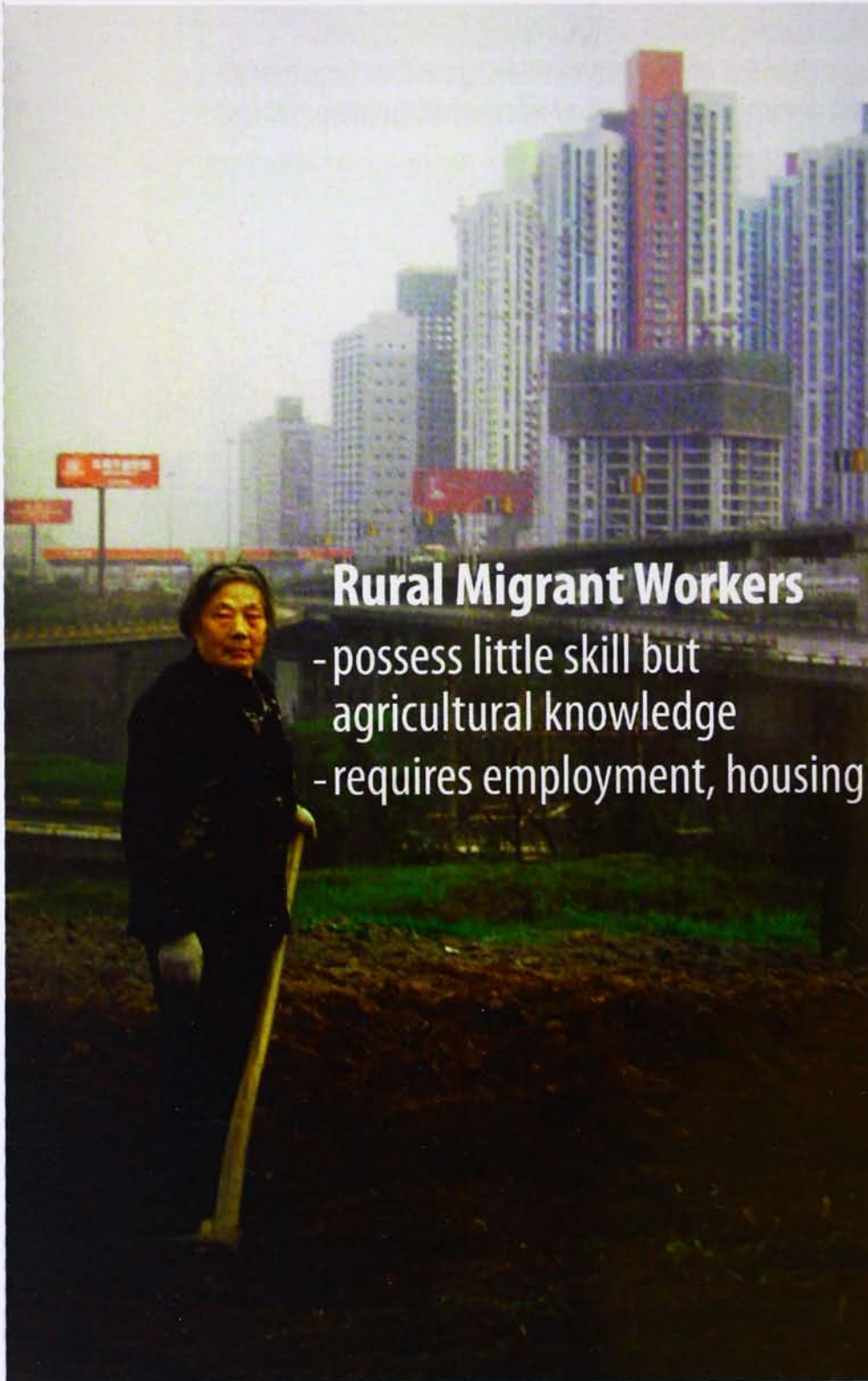
has to depend on themselves
oyment and accommodation

entertainments are luxuries

Image Source

Andreas Seibert, *From Somewhere to Nowhere*,
China's Internal Migrants, 2008, Baden

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
 Issue - Case Study



Rural Migrant Workers

- possess little skill but agricultural knowledge
- requires employment, housing

Shenzhen SEZ

- attracts seasonal tourists
- special economic conditions and opportunities that attract



Urban Ruins

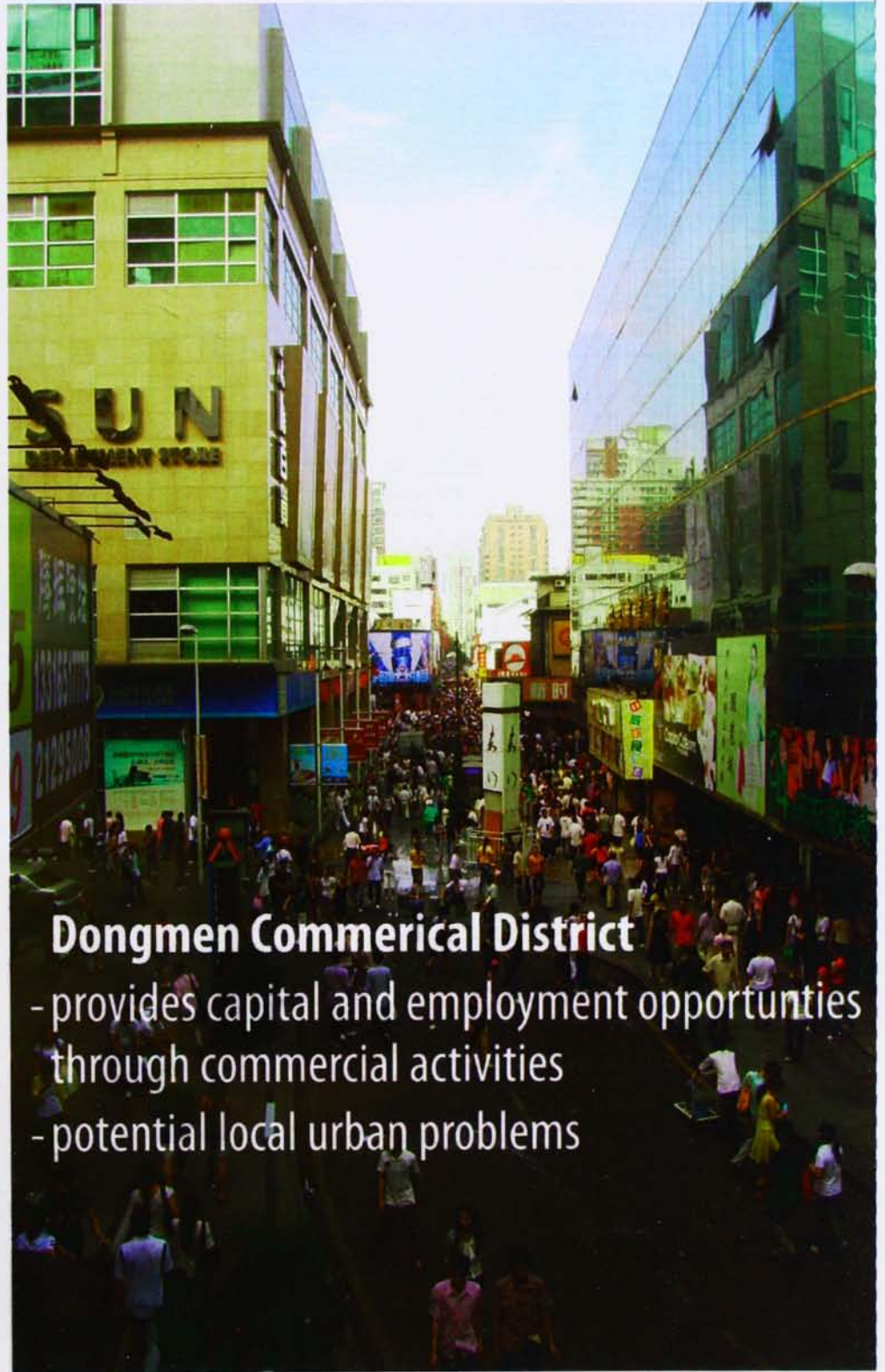
- mediate the three by acting as a bridge, offering its location and

Empowering
 the Over Exploited, Under Privileged

ts
tions provides business
tracts migrant workers

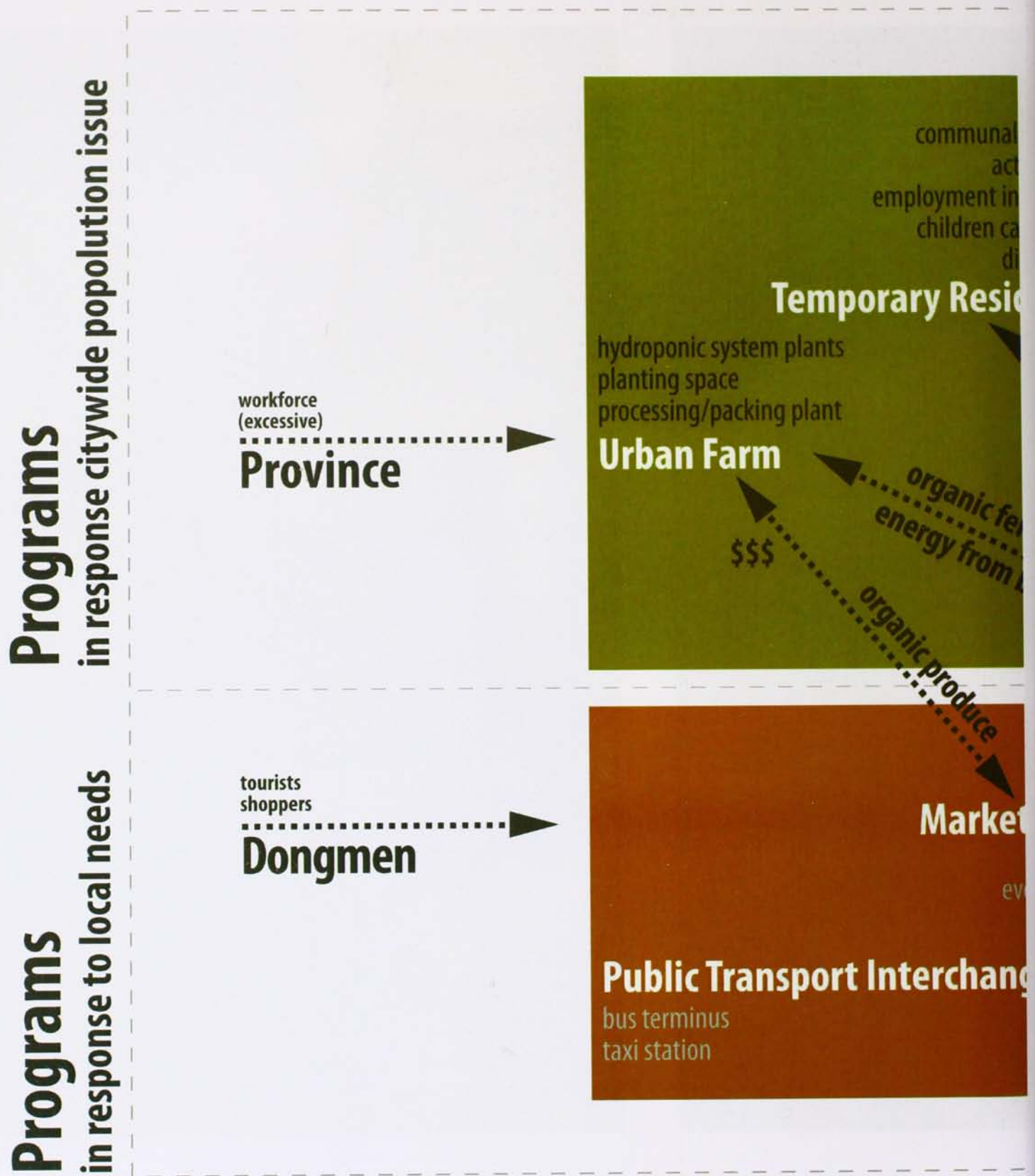


acting as a host
d space



Dongmen Commerical District

- provides capital and employment opportunities through commercial activities
- potential local urban problems



A Residential and Employment Buffer
for Floating Populations

rooms
facilities
activity hall
fo centre
re centre
ning hall
idence

guest rooms
services
dining facilities

Budget Hotel/Hostel

seasonal tourists influx

Province

ertilisers
biogas

place
stalls
ent space

Recycling Centre

processing plant
storage
loading/unloading

recyclable waste
kitchen waste

Dongmen

ge

Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Reusing, Resumption, Revitalisation



Scenario **FULL_OCCUPANCY**
47 200 sqm



Scenario for Architectural
Interpretation of Programs



Empowering
the Under Pr
with Urban F

Privileged Ruins



Instant Ruins - the Abandoned Architecture of Phenomenal Speculation Failures
Issue - Case Study



conventional farming
soil intensive farming **vs**
inorganic farming



Vertical Farming & Hydroponics

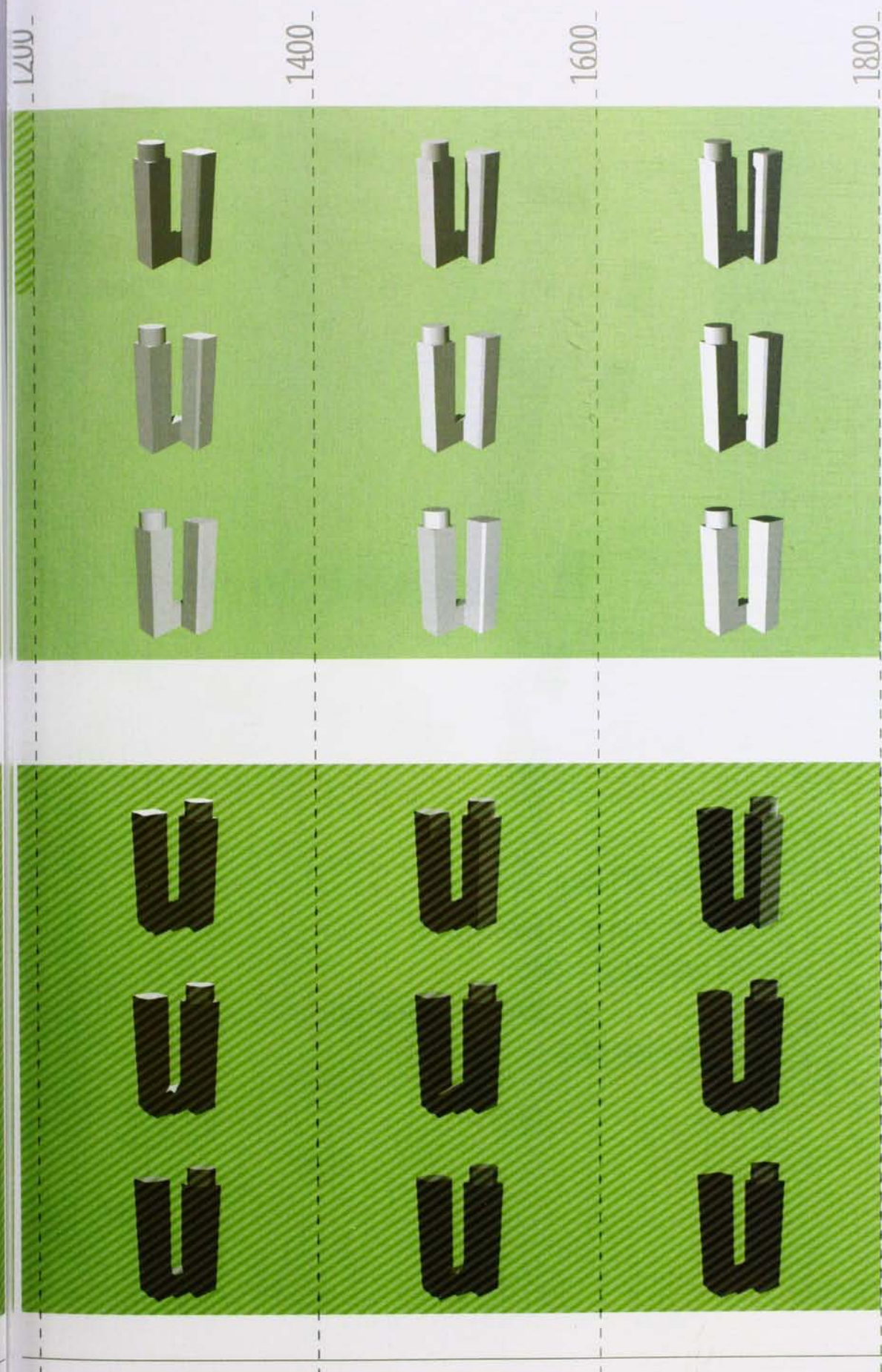
vertical farming
hydroponic farming
organic farming

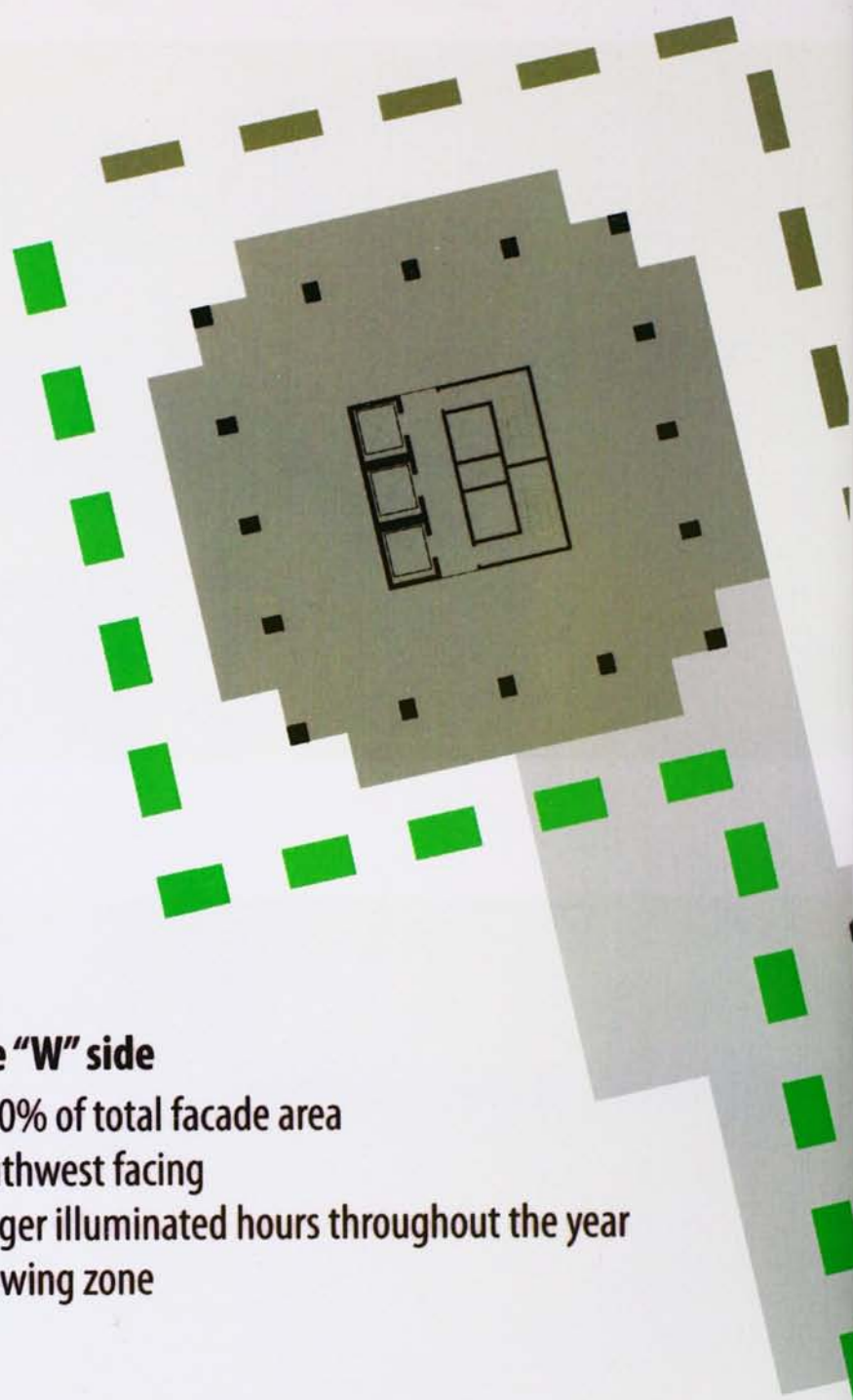
high economic value crop
species for medical use
higher technological and
skills requirement
comparatively
independent of weather





Agricultural Program
Solar-Facade Analysis



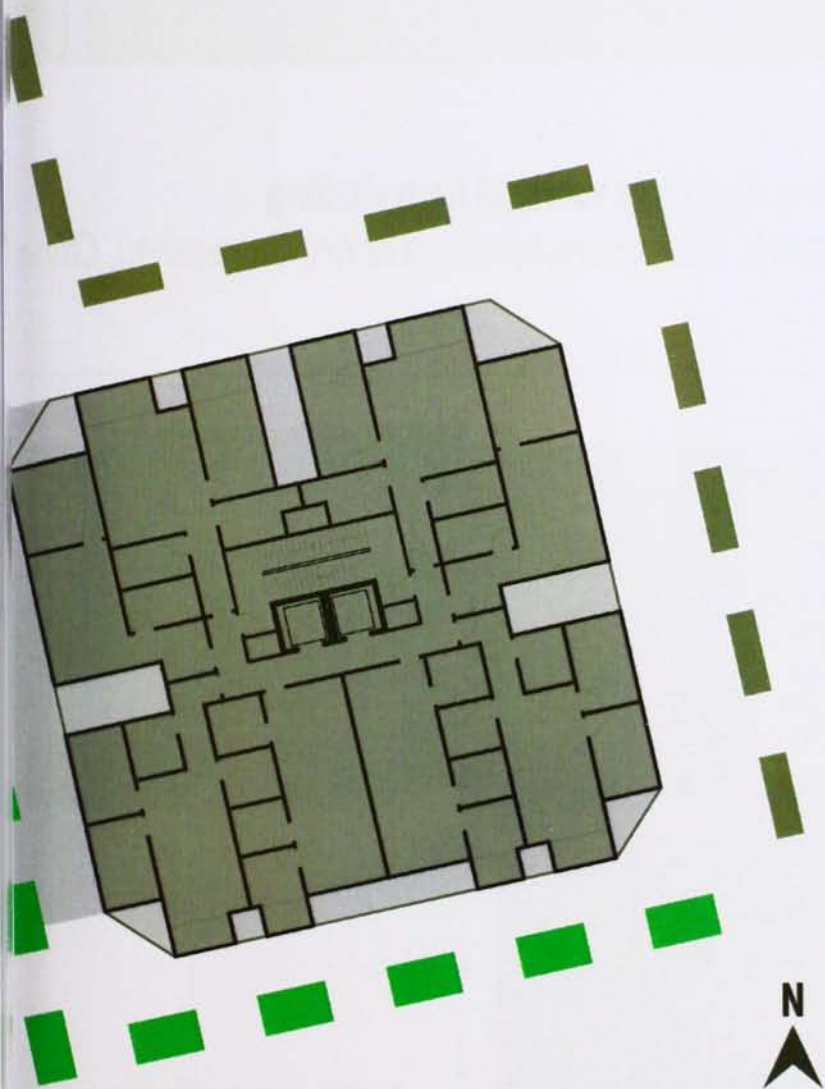
**the "W" side**

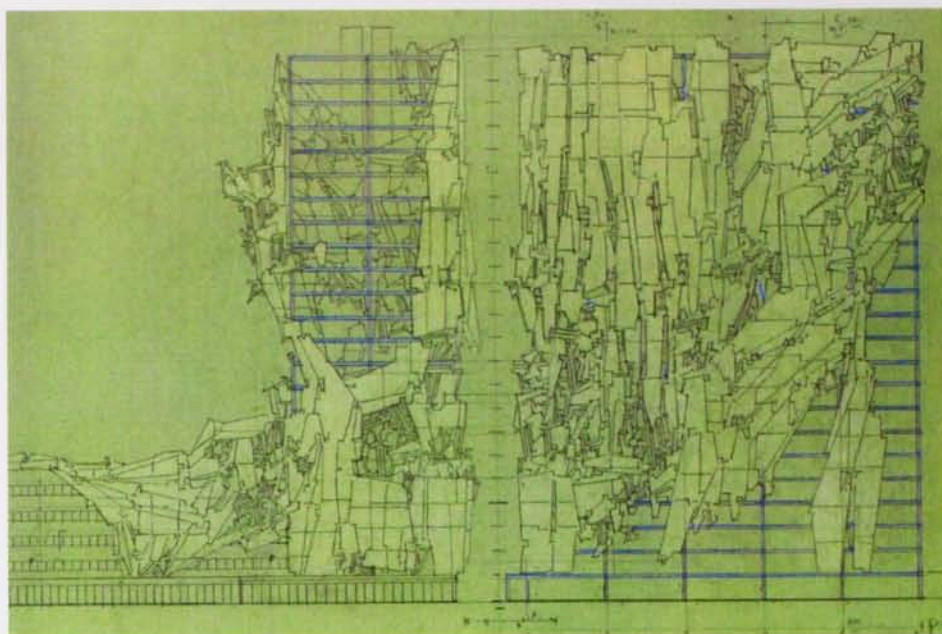
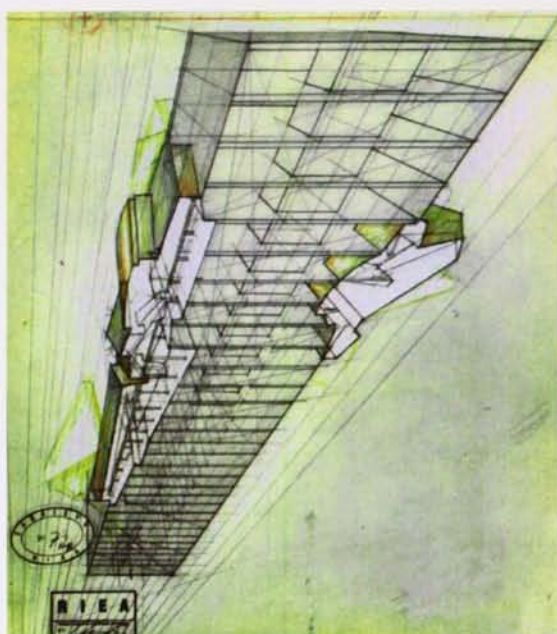
- ~50% of total facade area
- southwest facing
- longer illuminated hours throughout the year
- growing zone

Program Zoning Facade and Sunlight

the "M" side

- ~50% of total facade area
- northeast facing
- shorter illuminated hours throughout the year
- residential zone



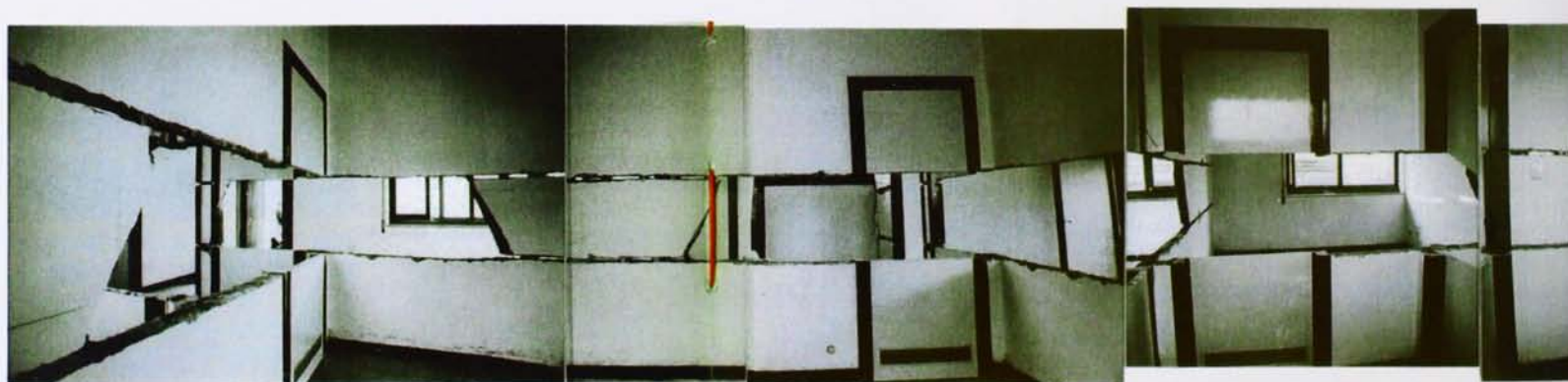


Addition / Parasites

Sarajevo, Lebbeus Woods - Scars/Scabs on remaining structures survived from shelling

Rem Koolhaas/Alain Fouraux/Doreen Liu, Times Branch, Guangdong Museum of Art, Guangzhou, China

Arne Quinze - Rebirth Paris, Paris, France



Subtraction / Division

Gordon Matta Clark

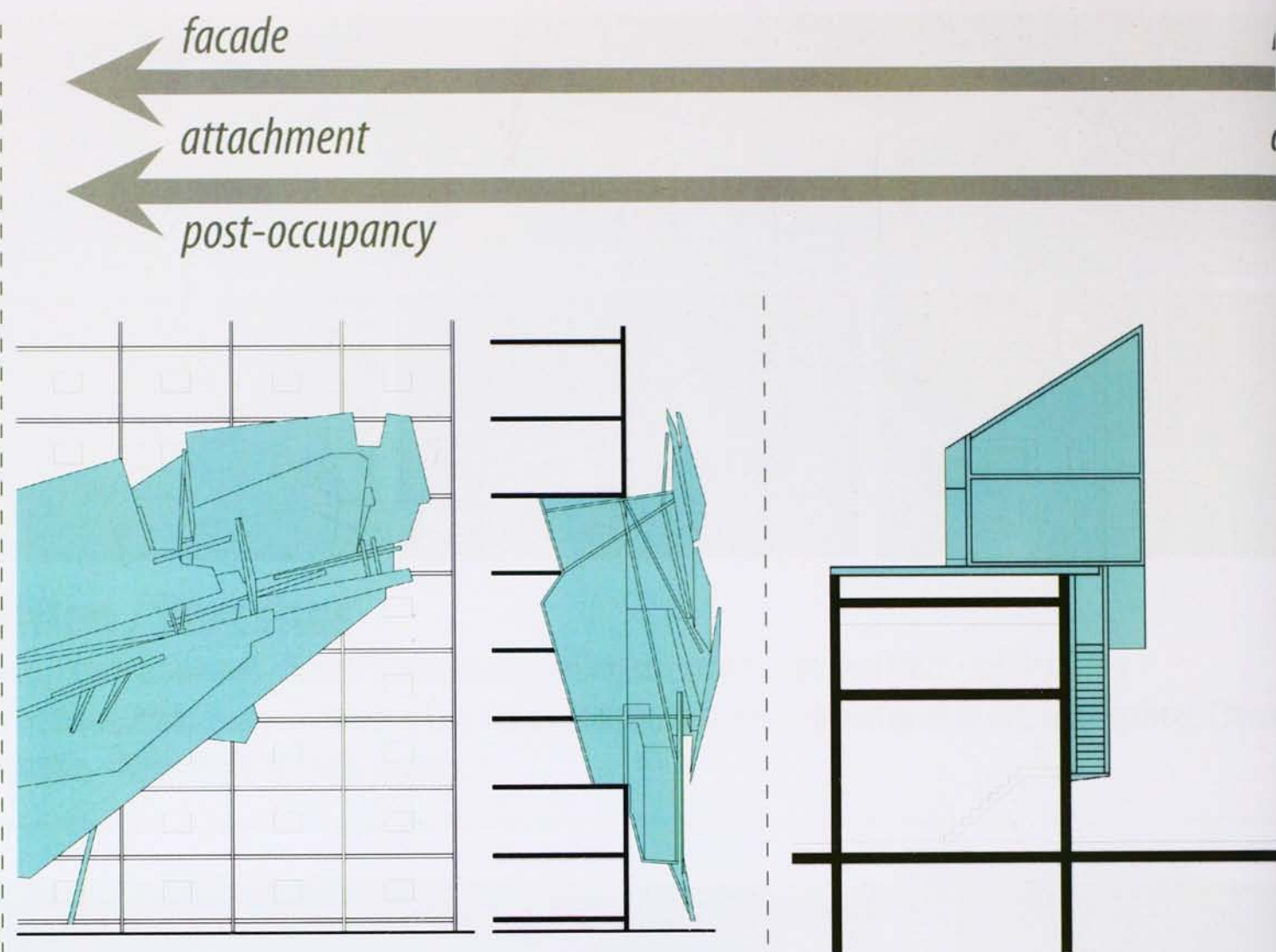
"completion through removal, abstraction of surfaces, not-building, not-to-rebuild, not-built-space"

"not the surface, but the thin edge, the severed surface that reveals the autobiographical process of its"

Possible Operations on Existing Structures



making"



Lebbeus Woods
Scars/Scabs
 Sarajevo, Bosnia

Korteknie Stuhlmacher Architecten
Parasite Las Palmas
 Rotterdam, the Netherlands

host	municipal, office buildings	industrial building
state of host	damaged in war	to be demolished
parasite	as a structural rehab function to be defined by user	residential
access to parasite	through existing building	through existing building lift core

Add-on Structures

A Parasitic Analysis

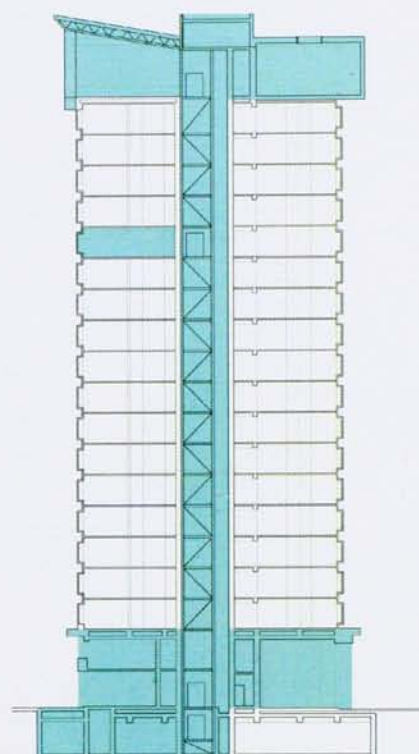
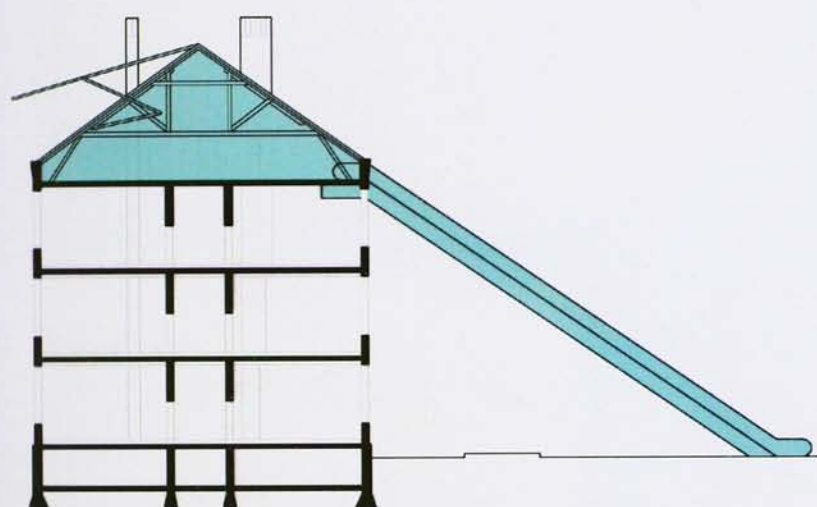
rooftop

add-on

Interior

intrusion

pre-occupancy



MVRDV
Children's Museum
 The Hague, the Netherlands

Rem Koolhaas/Alain Fouraux/Doreen Liu
Times Branch,
Guangdong Museum of Art
 Guangzhou, China

industrial building

functioning

museum

separate entrance and circulation

residential estate

functioning

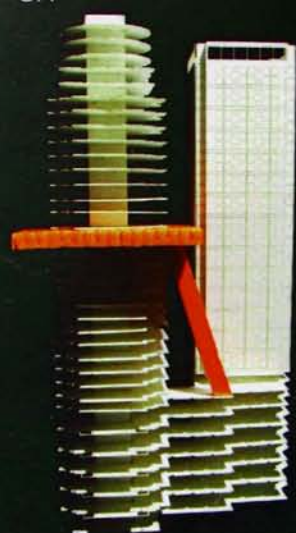
museum

separate entrance and circulation

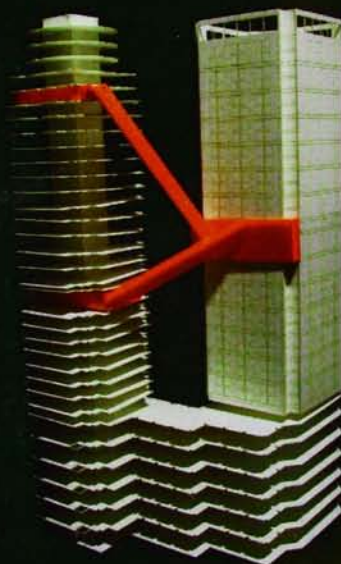
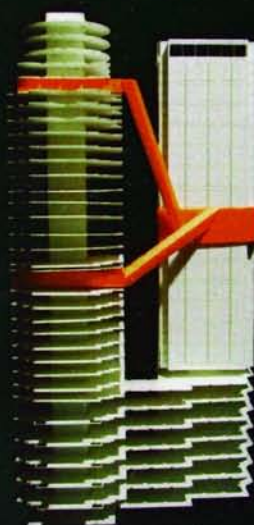




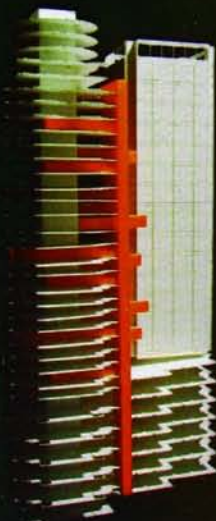
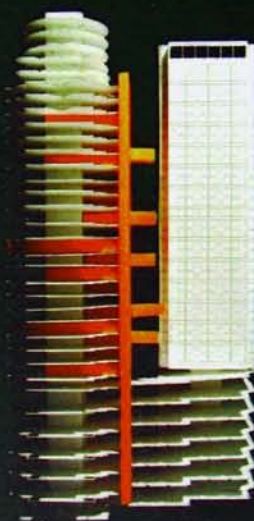
Add-on



Intrusion + Add-on



Intrusion + Attachment



Mutations : Rem Koolhaas, Harvard Project on the City : Stefano Boeri, Multiplicity : Sanford Kwinter, Nadia Tazi, Hans Ulrich Obrist
 Barcelona : ACTAR ; Bordeaux, France : Arc en reve centre d'architecture, 2000
 CALL NO. HT151 .M84 2000

Robert Adam / Alistair Rowan
 London: Victoria and Albert Museum, 1988
 CALL NO. NA2707.A3A4 1988

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 Koln : Taschen ; Cambridge, Mass. : Harvard Design School, 2001
 CALL NO. NA2543.S6 H37 2001

Volume
 Amsterdam, Netherlands : Archis Foundation, c2005-
 CALL NO. NA1 .V65

Domus no.882, 893
 Milano : [s.n.], 1928-
 CALL NO. N4 .D6

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 London ; New York : Verso, 1988
 CALL NO. E169.12.B3313

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 CALL NO. HT371 .A85 2006

City in progress : live from Zhang Jiang / zhu bian Fan Di'an ; zhi xing zhu bian Zhou Wei
 Beijing : Beijing tu wen tian di zhong qing cai yin zhi ban you xian gong si, 2006
 CALL NO. NA9266.S53 C53 2006

Irresistible decay : ruins reclaimed / Michael S. Roth with Claire Lyons and Charles Merewether
 Los Angeles, CA : The Getty Research Institute for the History of Art and the Humanities, 1997
 CALL NO. N8237.8.R8 R68 1997

Lost Russia : photographing the ruins of Russian architecture / William Craft Brumfield
 Durham : Duke University Press, 1995
 CALL NO. NA1181 .B75 1995

The necessity for ruins, and other topics / John Brinckerhoff Jackson
 Amherst : University of Massachusetts Press, c1980
 CALL NO. GF91.U6J323

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 Dublin, N.H. : William L. Bauhan, 1999
 CALL NO. NA4160 .M36 1999

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 Oxford ; Cambridge, Mass. : Blackwell, 1994
 CALL NO. HM477.F8 B3818 1994

Locating china : space, place, and popular culture / edited by Jing Wang
 New York, NY : Routledge, 2005
 CALL NO. HN733.5 .L63 2005

Gordon Matta-Clark / edited by Corinne Diserens ; survey by Thomas Crow ; essays by Judith Russi Kirshner and Christian Kravagna
 London : Phaidon, 2003
 CALL NO. N6537.M3947 G67 2003

Rachel Whiteread : transient spaces / organized by Lisa Dennison with Craig Houser
 New York, N.Y. : Guggenheim Museum Publications : Distributed by Harry N. Abrams, c2001
 CALL NO. NB497.W54 A4 2001

Radical reconstruction / Lebbeus Woods
 New York : Princeton Architectural Press, c1997
 CALL NO. NA2543.S6 W665 1997

War and architecture = rat i arhitektura / Lebbeus Woods
 New York, NY : Princeton Architectural Press, c1993
 CALL NO. NA2543.S6W67 1993

Anarchitecture : architecture is a political act / Lebbeus Woods
 London : Academy Editions ; New York : St. Martin's Press, c1992
 CALL NO. NA2543.S6 W65 1992

Earthquake! : a post-biblical view / Lebbeus Woods
 Wien ; New York : Springer, c2001
 CALL NO. TA658.44 .W66 2001

BorderLine / Lebbeus Woods, Ekkehard Rehfeld, editors
 Wien ; New York : Springer, c1998
 CALL NO. NA2500 .B629 1998

The Gulf / [curator], Rem Koolhaas
 Baden : Lars Muller, Rotterdam : OMA-AMO, 2007
 CALL NO. NA1465.3 .K66 2007

Studio 8 architects / C.J. Lim
 Mulgrave, Vic. : Images Pub., 2005
 CALL NO. NA997.L55 A4 2005

Devices : a manual of architectural + spatial machines / C.J. Lim
 Amsterdam ; Boston : Elsevier, 2006
 CALL NO. TA403.6 .L54 2006

441/10 ... we'll reconfigure the space when you're ready / C.J. Lim, Studio 8 architects ; with texts by Christine Hawley, Itsuko Hasegawa
 London : [Studio 8 Architects] ; c1996
 CALL NO. NA997.L55 A4 1996

Neotigers : photographs of Asian megacities / Peter Bialobrzeski ; Florian Hanig, Christoph Ribbat, text
 Ostfildern-Ruit, Germany : Hatje Cantz ; New York : [distributor] D.A.P., Distributed Art Publishers, c2004
 CALL NO. TR655 .B52 2004

Realms of impossibility. Ground / series creator C.J. Lim. Water ; editors, C.J. Lim, E.D. Liu
 Chichester : Wiley-Academy, 2002
 CALL NO. NA2500 .L56 2002

Universal experience : art, life, and the tourist's eye / curated by Francesco Bonami, with Julie Rodrigues Widholm and Tricia Van Eck
 Chicago : Museum of Contemporary Art, c2005
 CALL NO. N72.T68 U55 2005

Daizukai kyuryujo / Kyuryujo tankentai shashin bun ; Terasana Hitomi kai ; Kani Hiroaki kanshu
 Tokyo : Iwanami shoten, 1997
 CALL NO. DS796.H76 K65 1997

Parasitic intrusion / Kong Pui Chuen Castor
 CALL NO. NA2543.S6 K66 2004

The city of small things / editor, Stichting Parasite Foundation, Mechthild Stuhlmacher, Rien Korteknie
 Rotterdam, Netherlands : s.n., 2001
 CALL NO. NA7361 .C578 2001

FARMAX : excursions on density / edited by Winy Maas and Jacob van Rijs with Richard Koek ; translations from Dutch into English were made by John Kirkpatrick
 Rotterdam : 010 Publishers, 1998
 CALL NO. NA9053.S6 F37 1998

Parasite paradise : a manifesto for temporary architecture and flexible urbanism / compilation and editing, Liesbeth Melis ; translation, John Kirkpatrick
 Rotterdam : NAI Publishers, c2003
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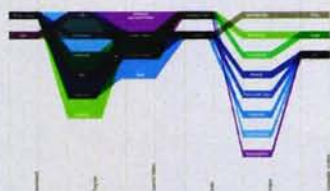
urban ruins -
empowering
the under privileged



ISSUE
Significant Cases



Analysis of Significant Causes of Speculation Failure

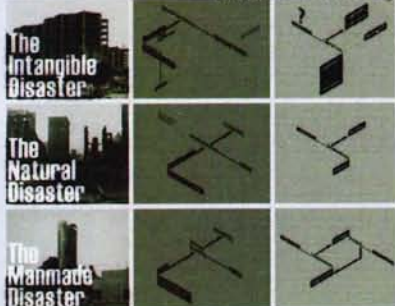


Instant Ruins



Intangible Disaster

Cause	Recovery
-------	----------



Responses to Urban Ruins



shenzhen The Inherent City
Reported to the world since 1980
It was selected as the top 10 cities in the world in Guangdong region

Shenzhen Special Economic Zone (SEZ)
Symbolic Analysis

Real Estate Development in Guangdong Region



Dongmen Building / Gangao No.8

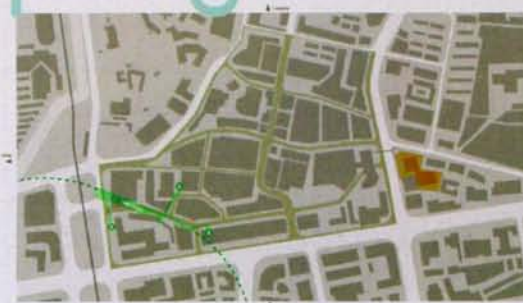


Dangmen Building - the Twin Tower



Situation Plan - Dongmen

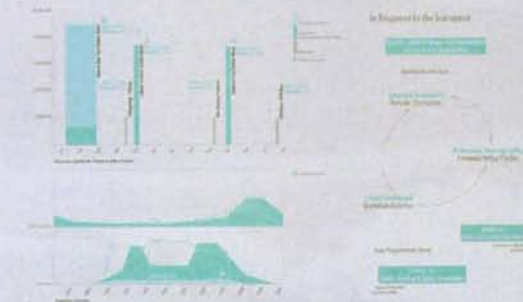
Situation Plan - Donomen



Observations in Shenzhen



Perennial / Quotidian Cycles



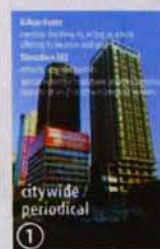
Migrant Worker's Needs



Dongmen Local's Needs



Scale of Programming



A Residential and Employment Buffer for Floating Populations



Program - Scenarios

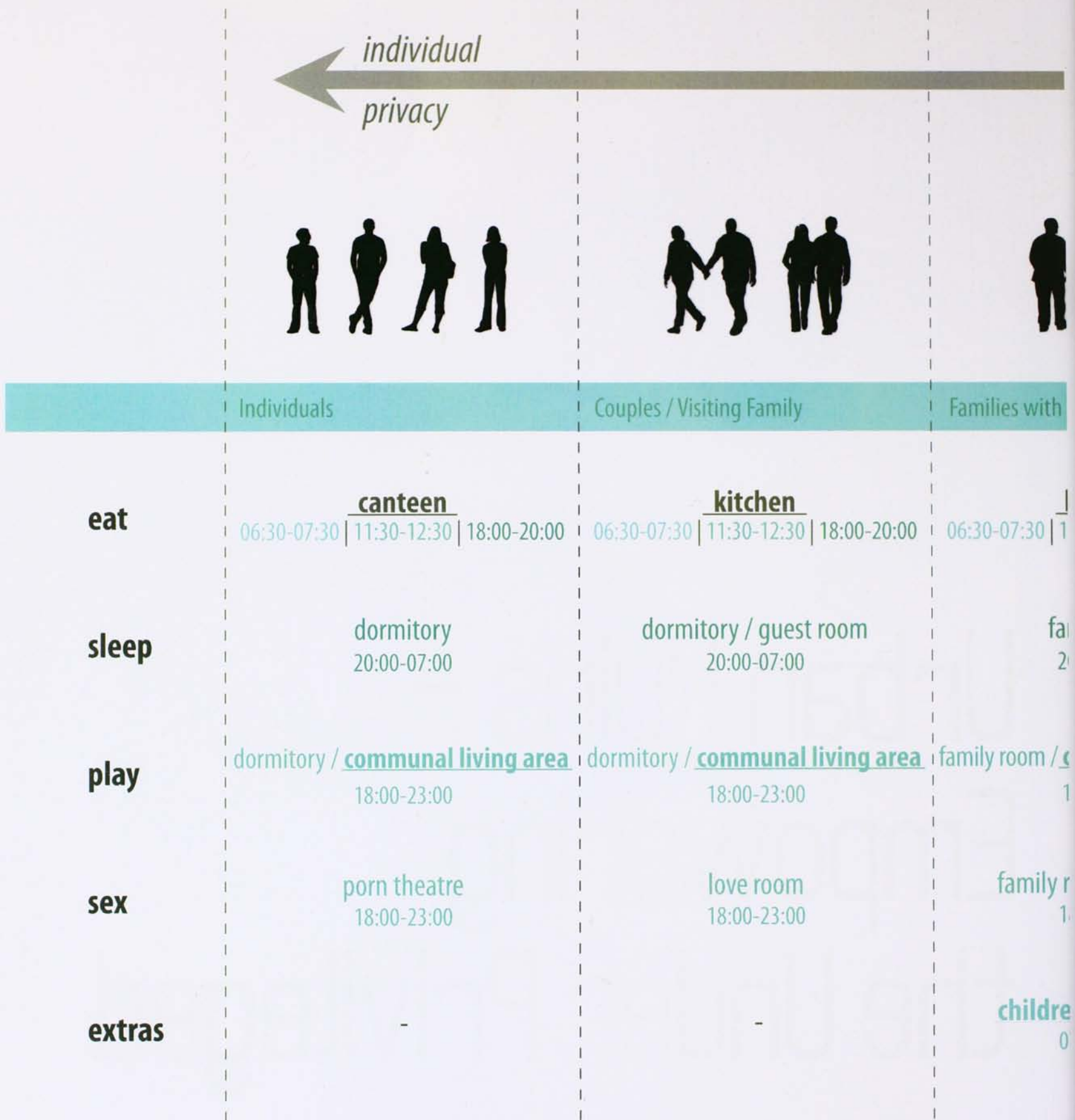
str
Vertical Farming

Solar / Facade Analysis







Urban Ruins – Empowering the Under Privileged

Thesis Report -
Design Phase



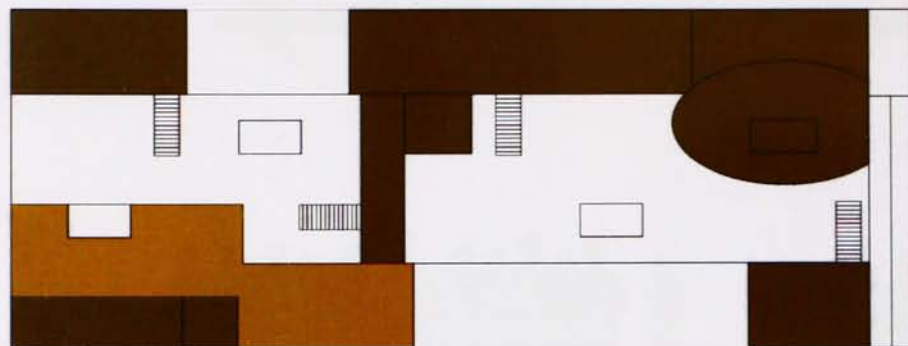
Migrant Workers' Spatial Needs

- from Individual to Communal

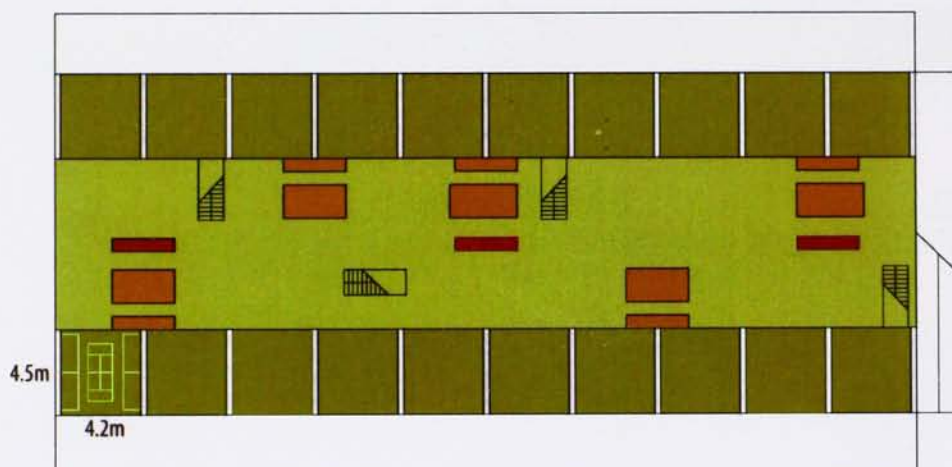
communal interaction 		
		
children	Groups of male/female	Community
<u>kitchen</u> 1:30-12:30 18:00-20:00	<u>canteen</u> 06:30-07:30 11:30-12:30 18:00-20:00	<u>canteen</u> 06:30-07:30 11:30-12:30 18:00-20:00
mily room 0:00-07:00	-	-
<u>ommunal living area</u> 8:00-23:00	<u>communal living area</u> 18:00-23:00	<u>cinema/performance space</u> 18:00-23:00
oom/love room 8:00-23:00	-	-
n care facility 7:00-19:00	-	<u>high capacity sanitary space for morning rush hours</u> 05:30-07:00

Urban Ruins - Empowering the Under Privileged Design - Diagrams and Strategies

Seiyaku Women's Dormitory, Tokyo, Kazuyo Sejima



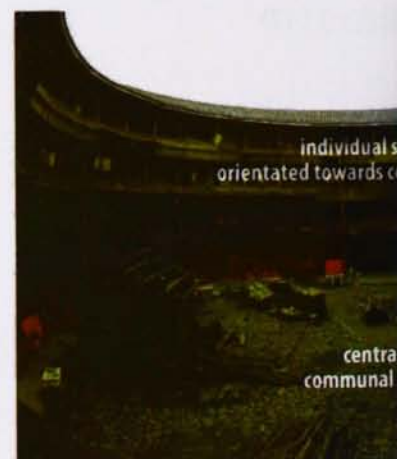
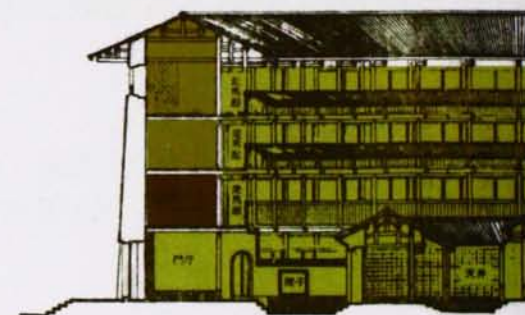
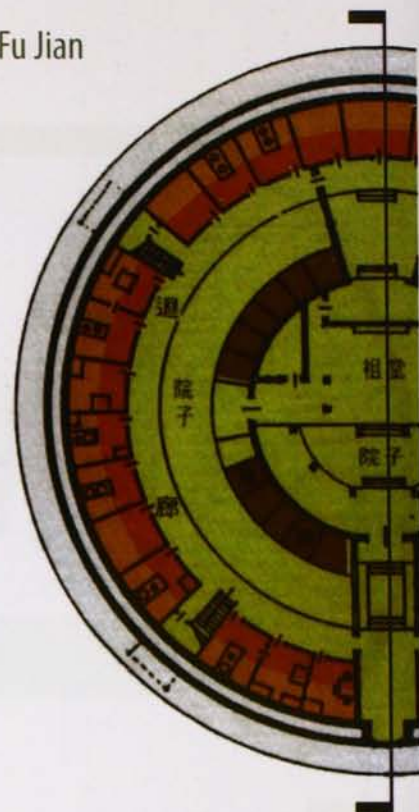
1F



GF

Dormitory module for 4 people

To Lou, Fu Jian



Program and Spatial Study - Collective Housing and Community Living

Migrant Workers' current living conditions



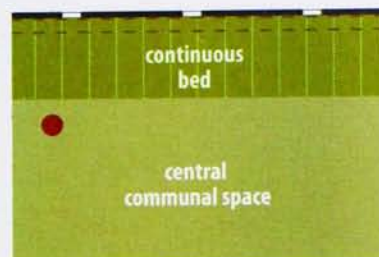
GF



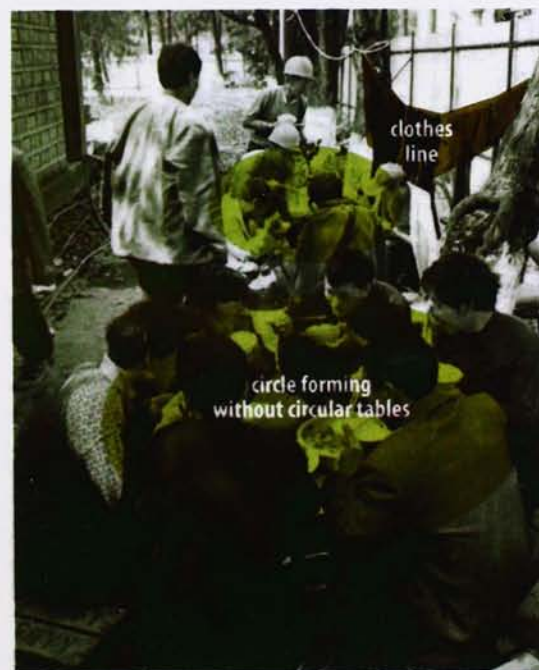
Section



Sleeping



Leisure



Eating

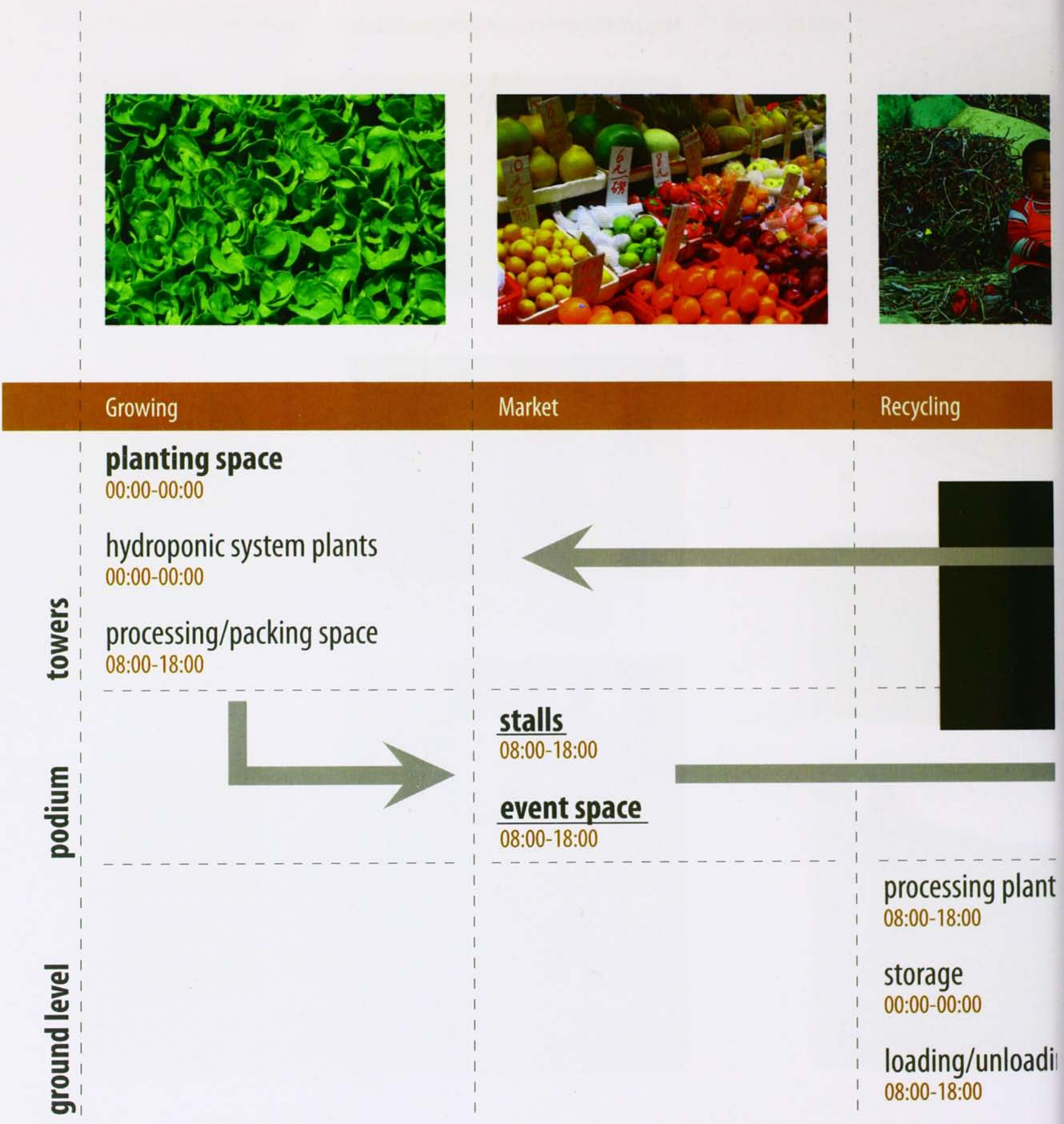


Legend

- kitchen
- bathroom
- bedroom / living
- communal space
- storage / services

Image Source

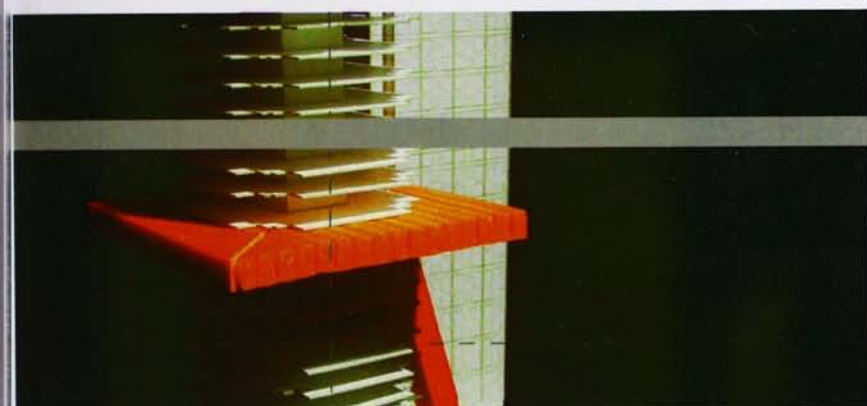
- www.tplm123.com
- Andreas Seibert, *From Somewhere to Nowhere, China's Internal Migrants*, 2008, Baden





Public Transport Interchange

Visiting



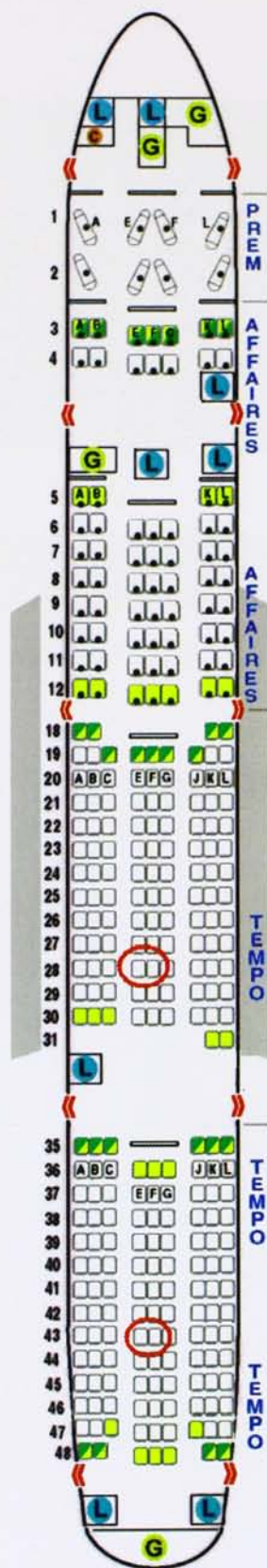
public access route
08:00-24:00

public access route
08:00-24:00

public access route
08:00-24:00

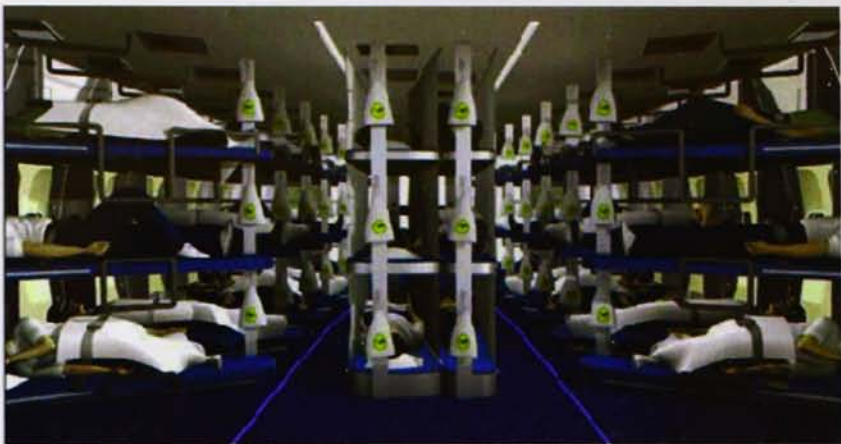
taxi station
00:00-00:00

local bus terminus
05:30-24:00

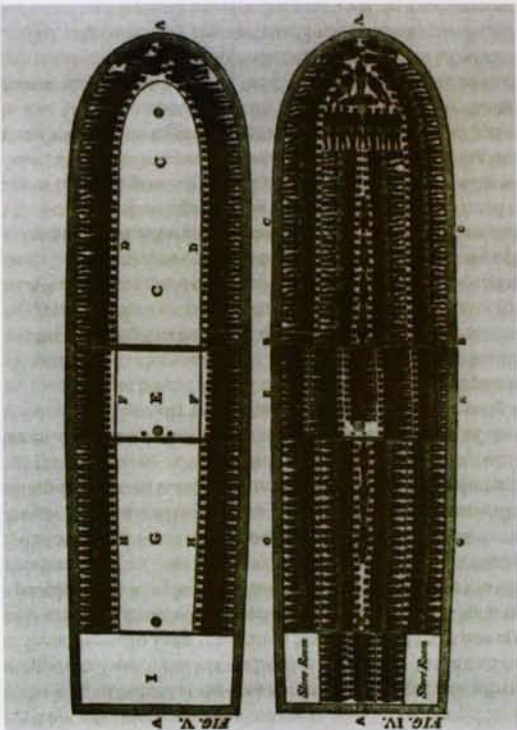


Seating plan of a typical commerical aircraft

Density:
0.75-1.12
sqm/person



Lufthansa's proposal of bunk-bed style sleeper seating in economy class



Plan and interior of a slave ship in the 18th Century

Program and Spatial Study:
On Maximising Density - Sleeping in Transit

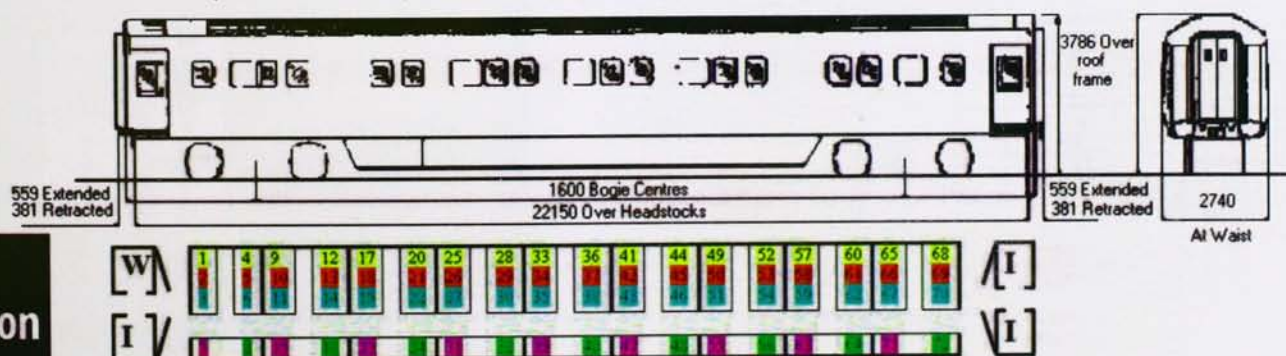
Dens
0.84



Nighttime Configuration ■ **Daytime Configuration**

A sleeper carriage, China Railways

12 Compartments + Pantry version



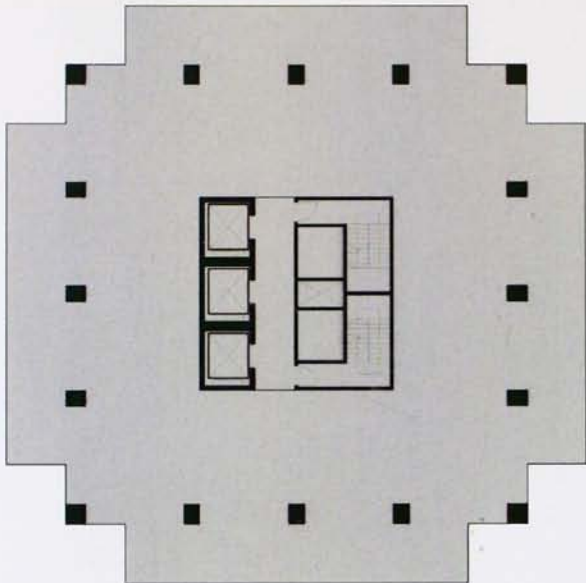
- 1, 4, 9 and so on = window seat in daytime, and lower berth at night.
- 2, 5, 10 and so on = middle seat in daytime, and middle berth at night.
- 3, 6, 11 and so on = Aisle seat in daytime, and upper berth at night.
- 12, 13 and so on = side window seat in daytime, and lower side berth at night.
- 14, 15 and so on = side window seat in daytime, and upper side berth at night.

- W = Western style toilet.
- I = Indian style squat toilet.
- / & \ = Carriage entry/exit doors.

This illustration is not to scale

Seating/Sleeping arrangement on an Indian sleeper carriage

1 | Existing

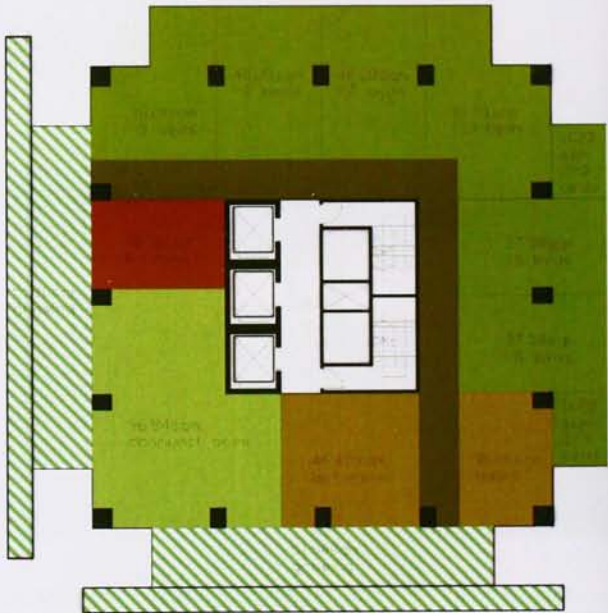


2 | Zoning

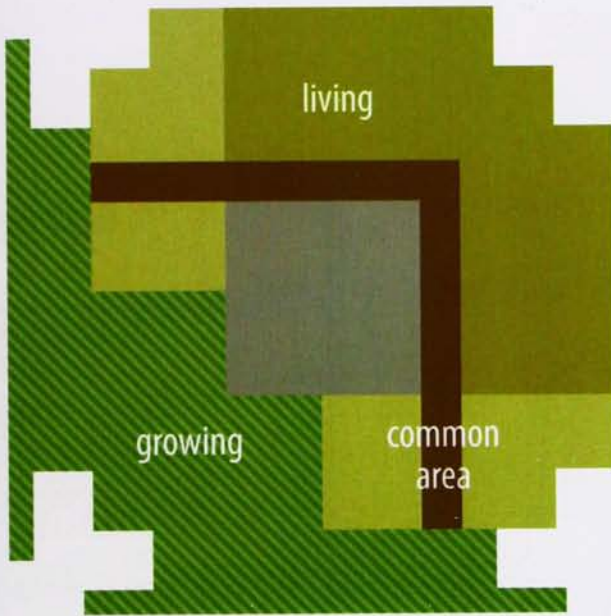


Residence Module - M1/F
app. population: 50-55

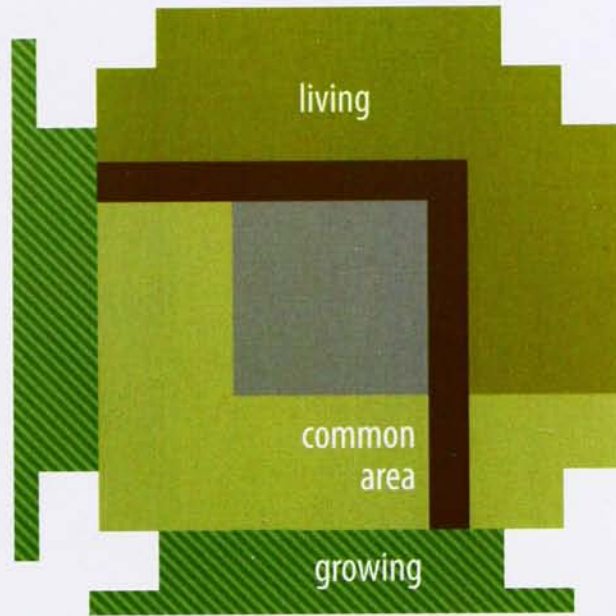
2 | Zoning



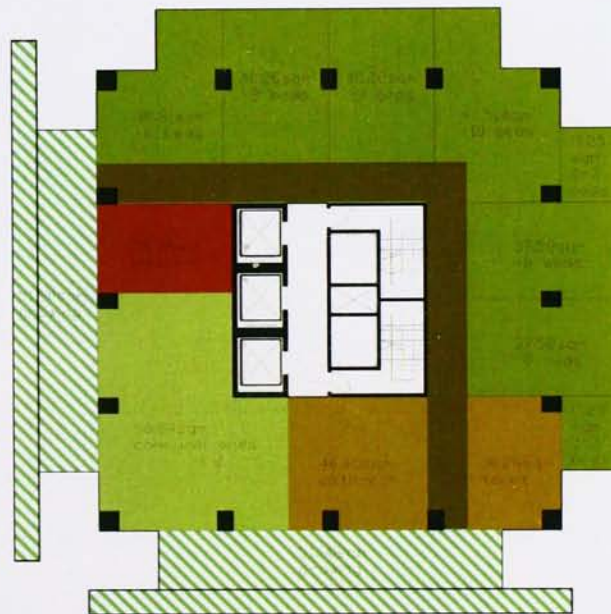
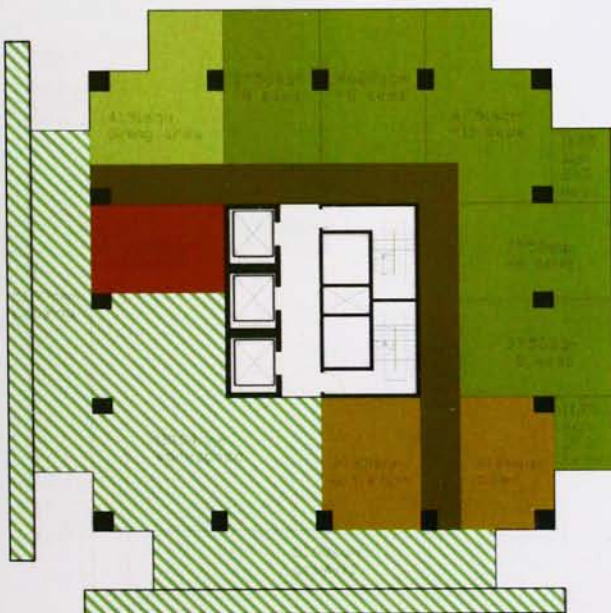
Program and Spatial Study -
Working & Living Module



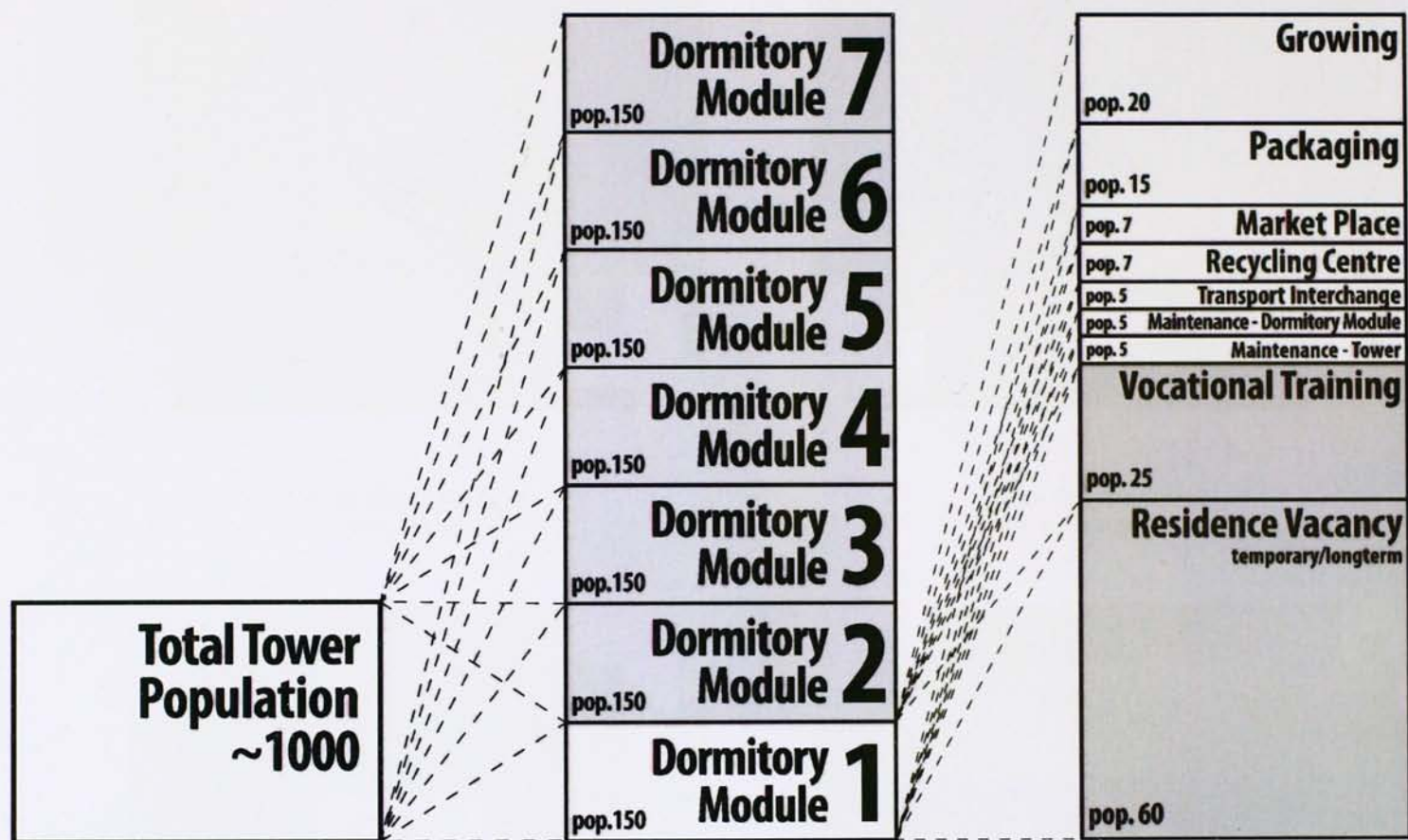
Residence Module - M2/F
app. population: 42-45



Residence Module - M3/F
app. population: 50-55



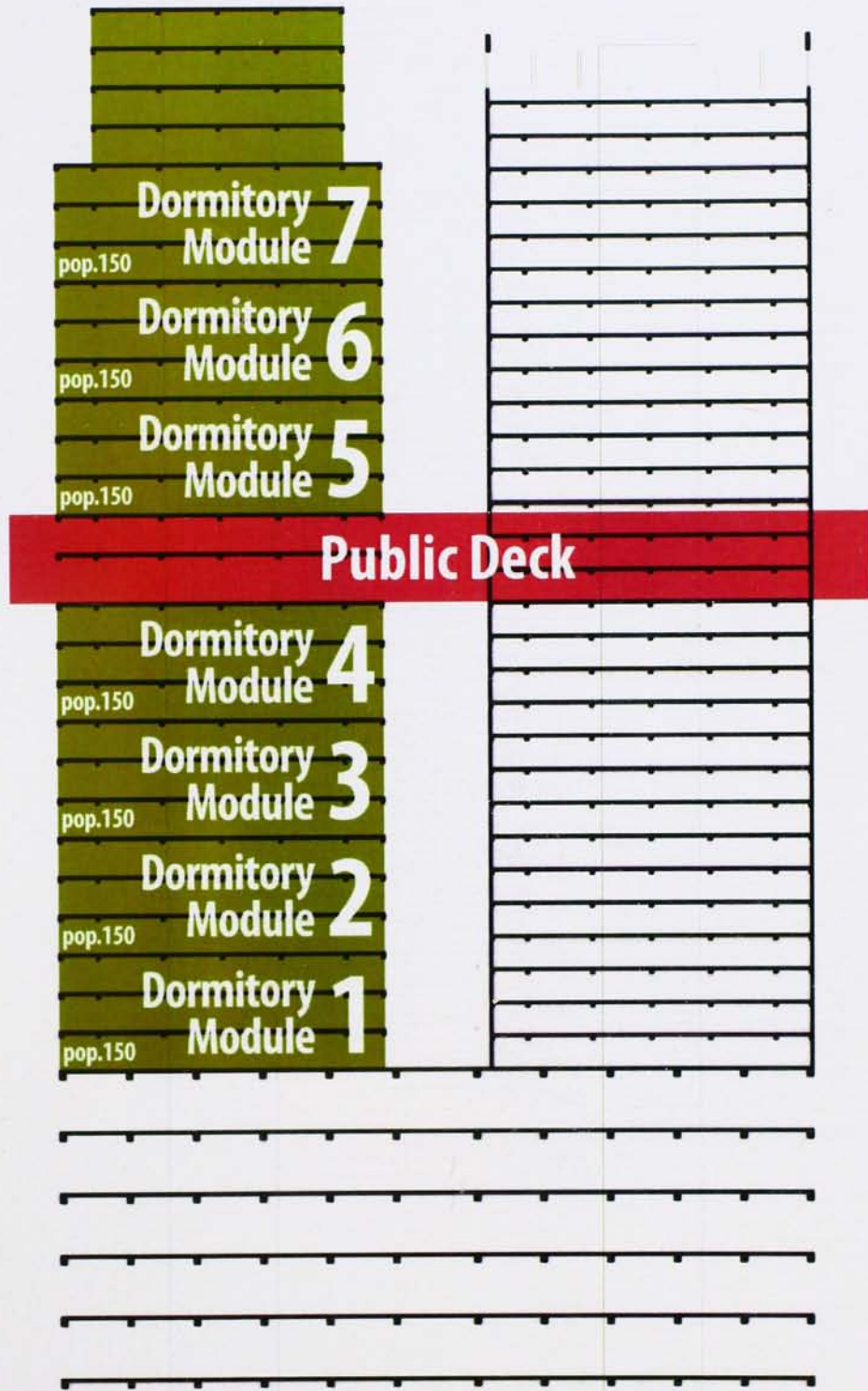
- kitchen
- bathroom
- bedroom / living
- communal space
- storage / services

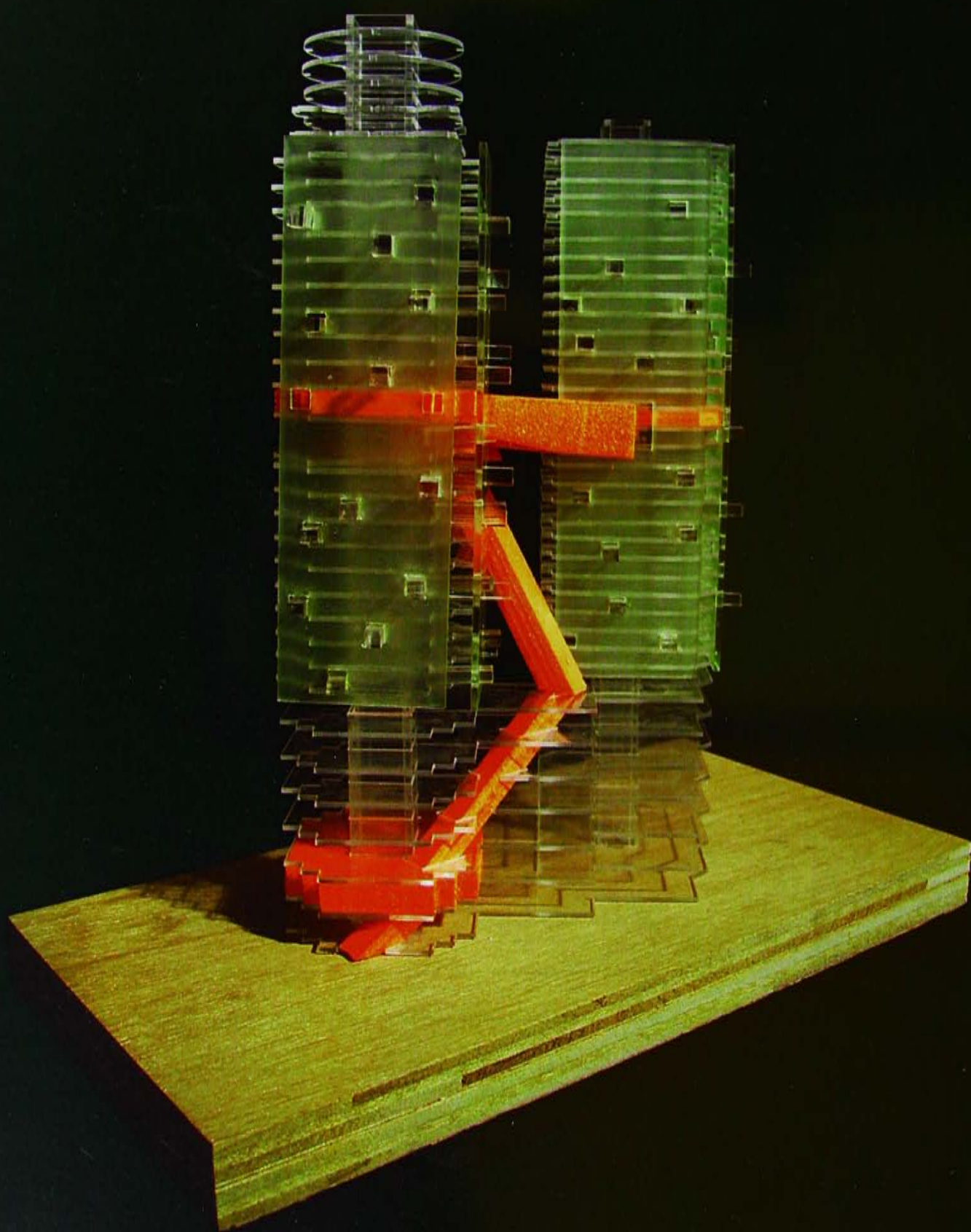


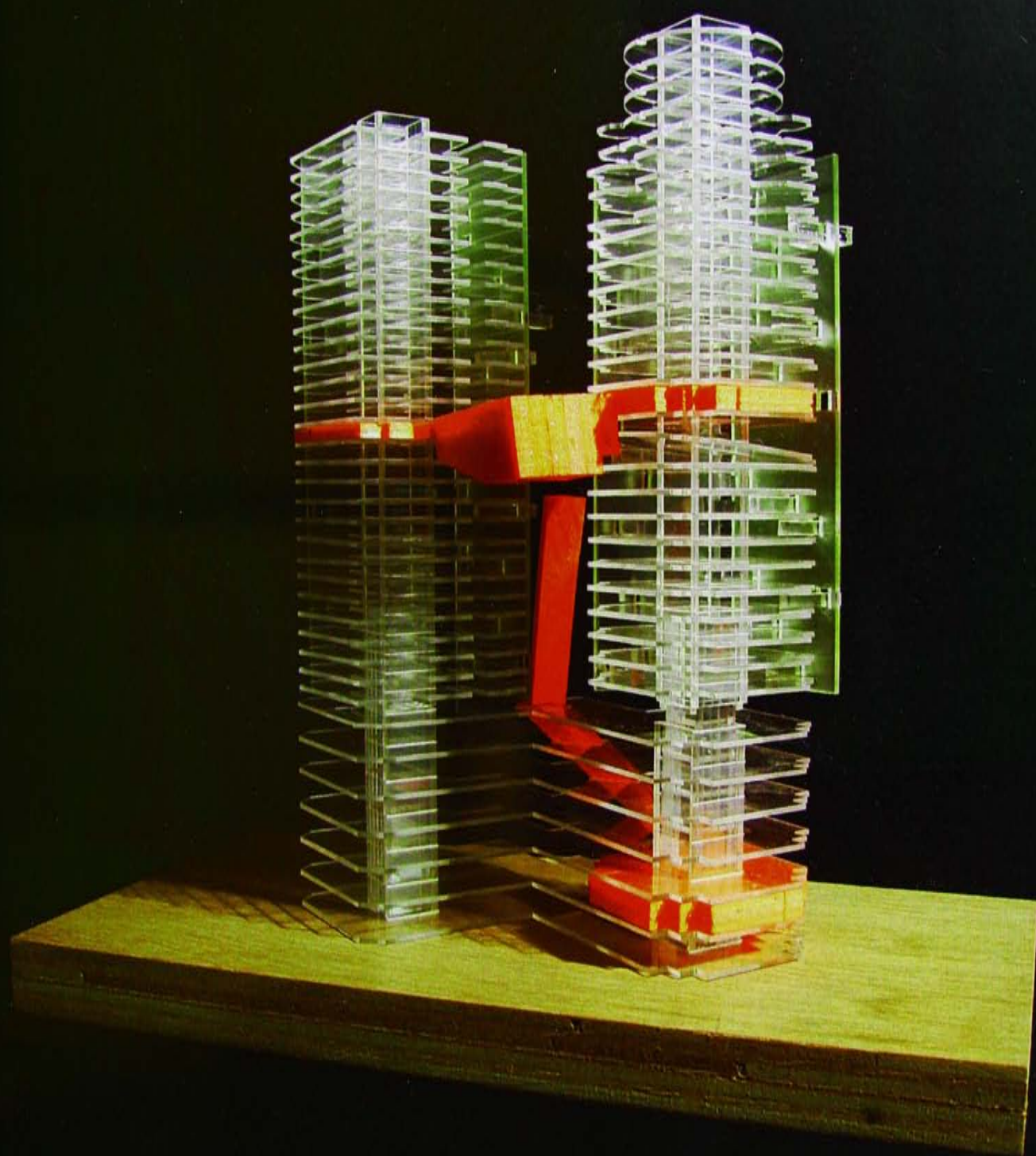
Program and Spatial Study -
Working & Living Module

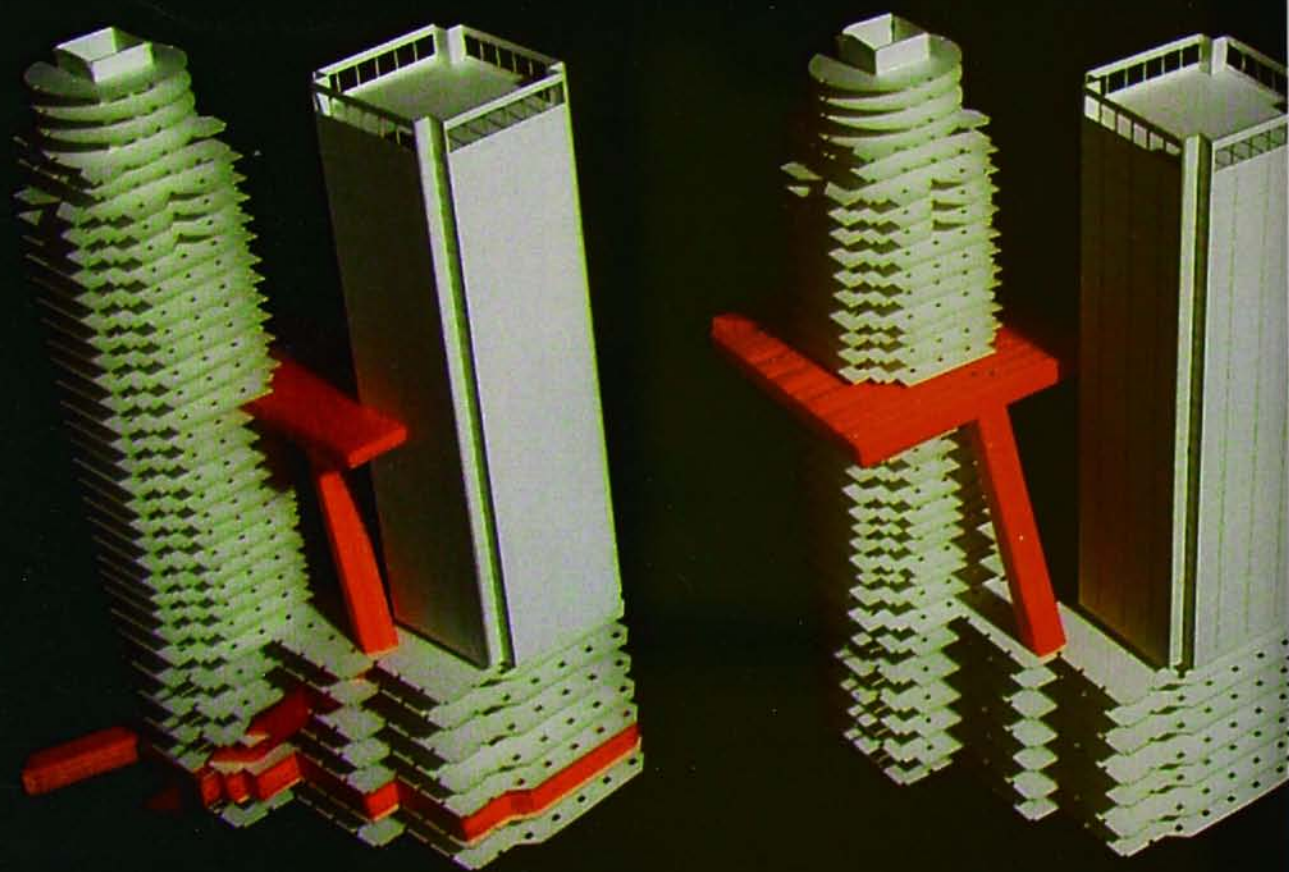
**Fixed
Tower
Population**

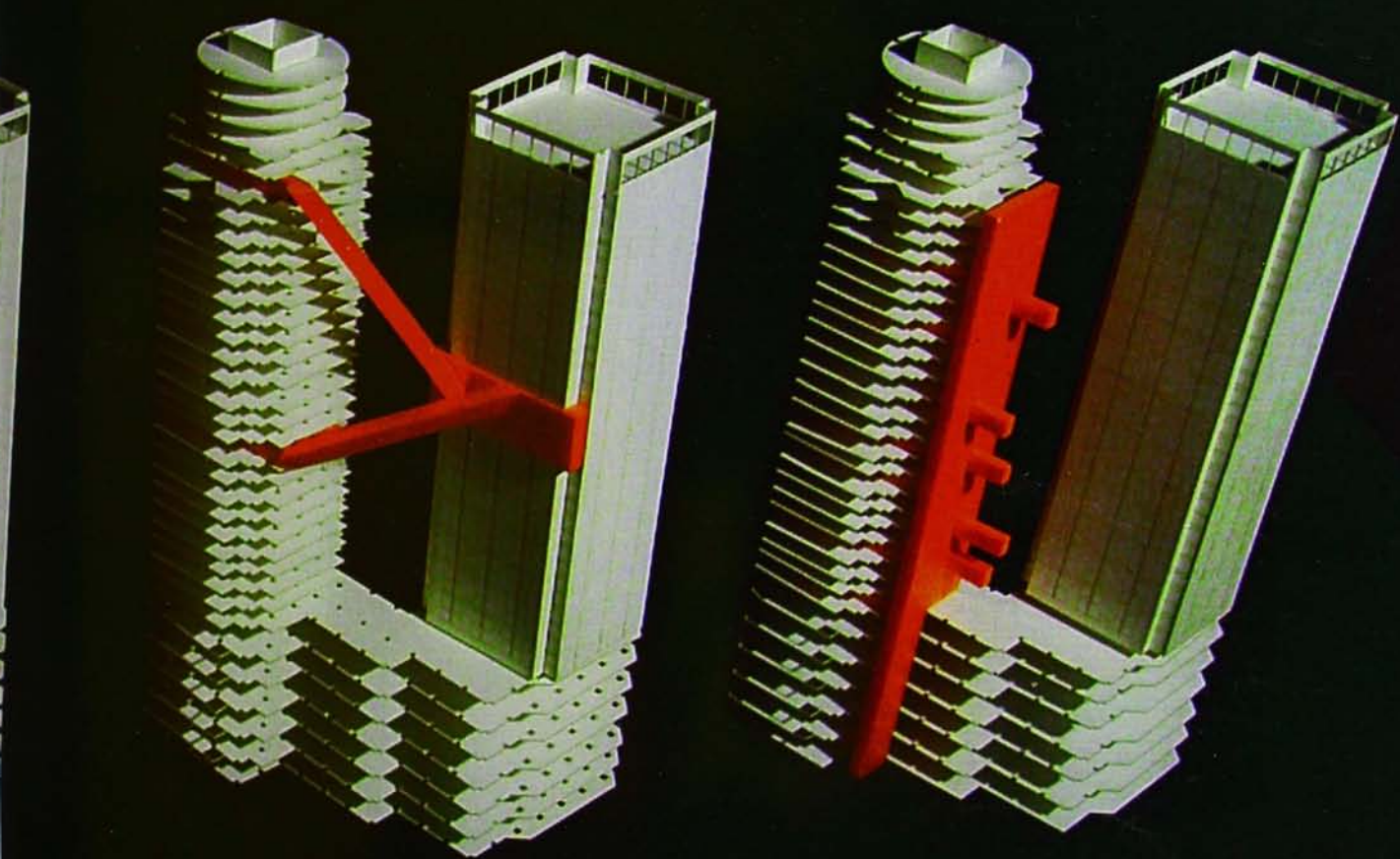
**Floating
Tower
Population**



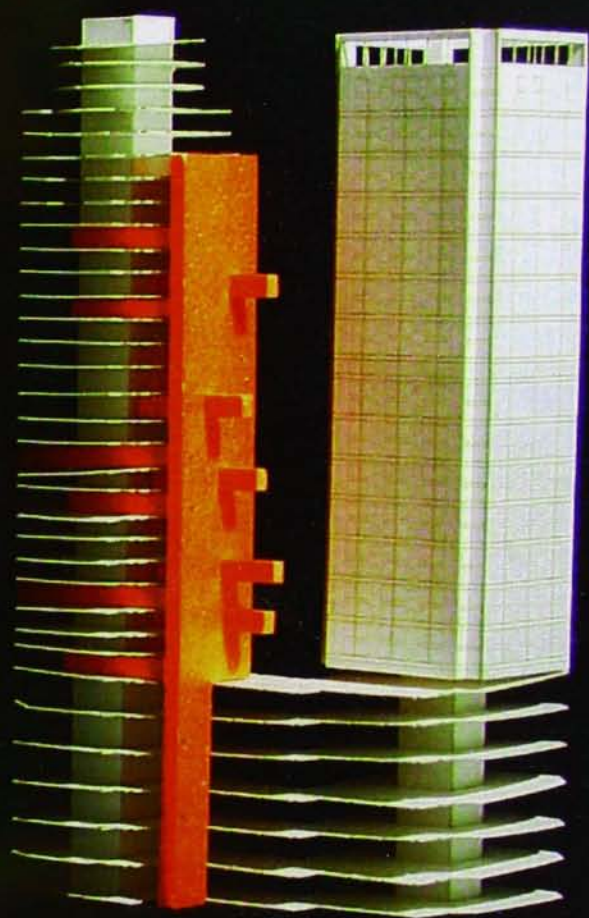
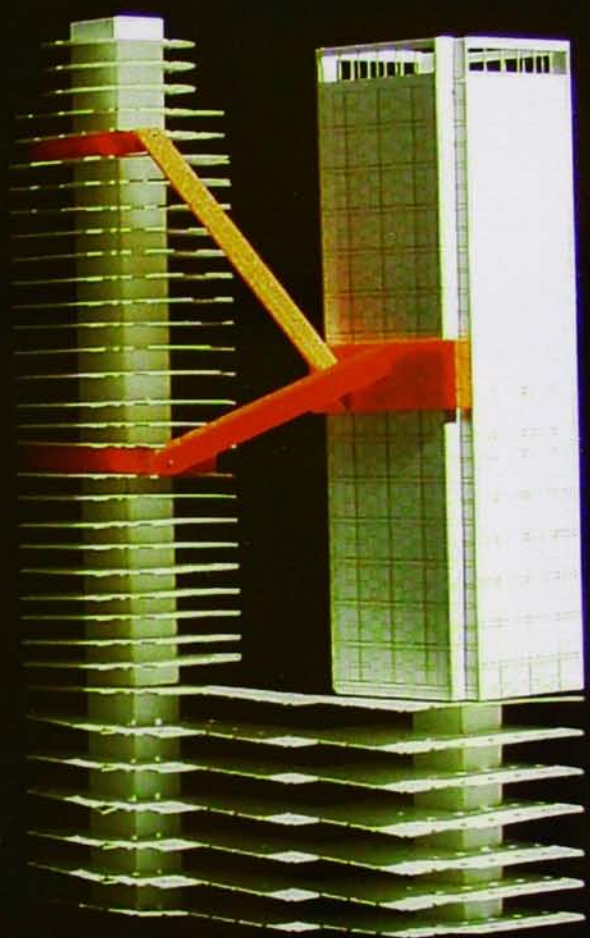


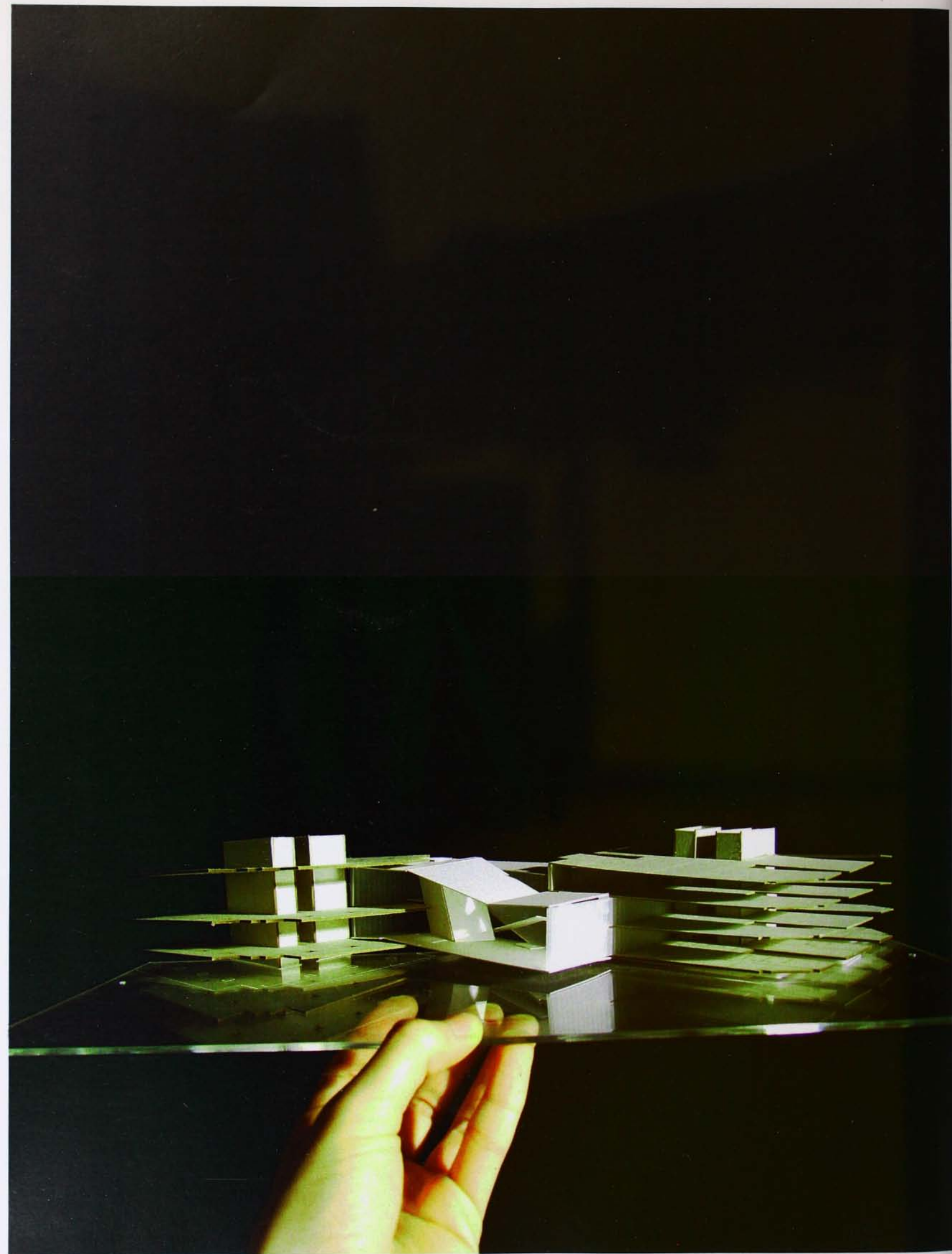


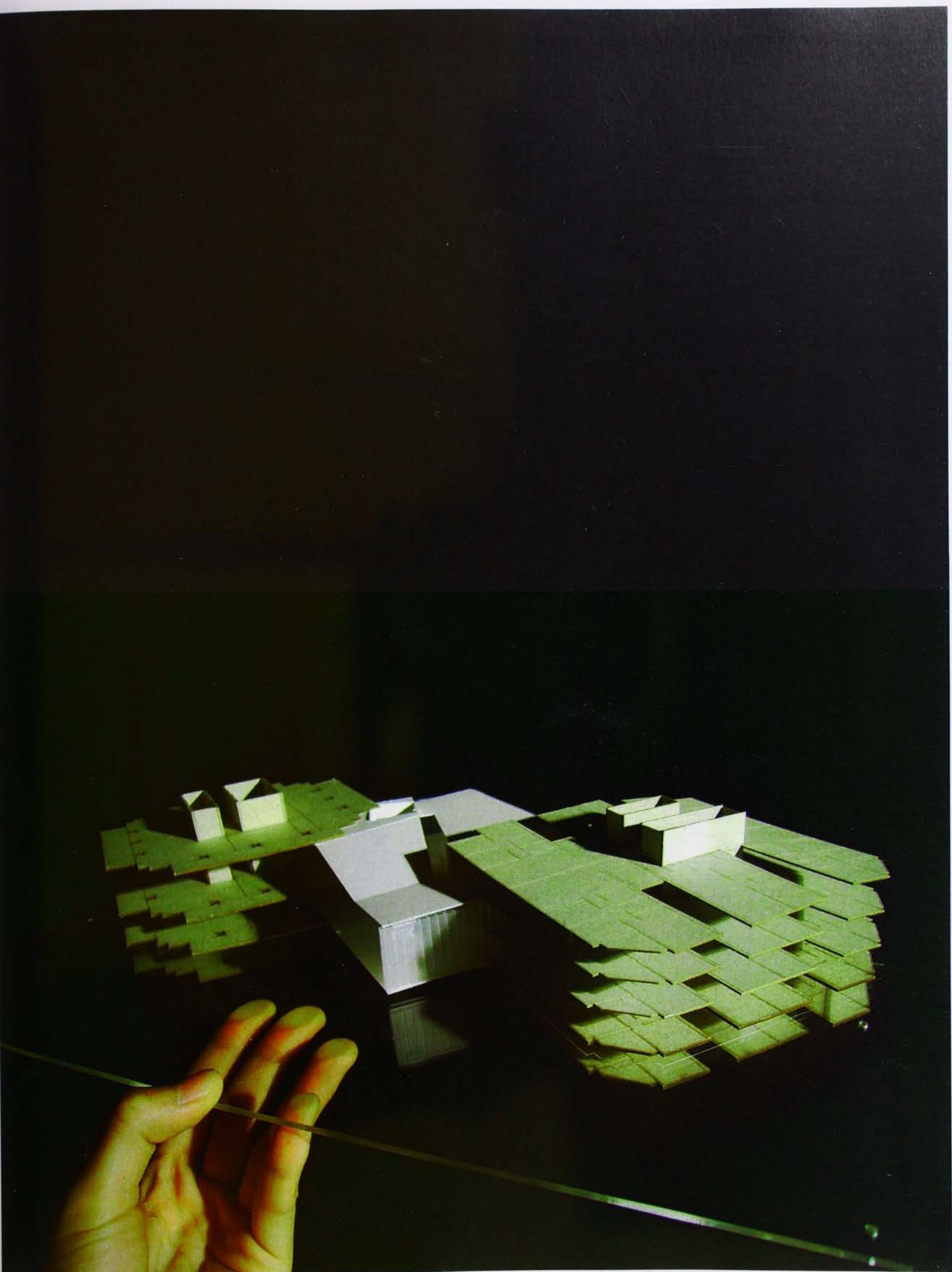


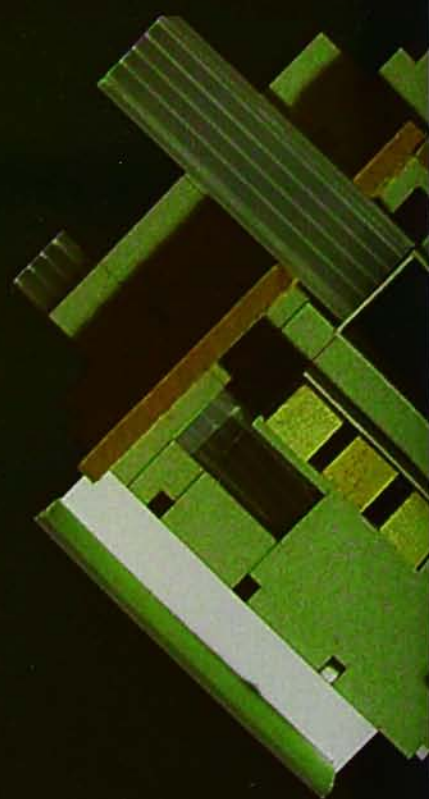
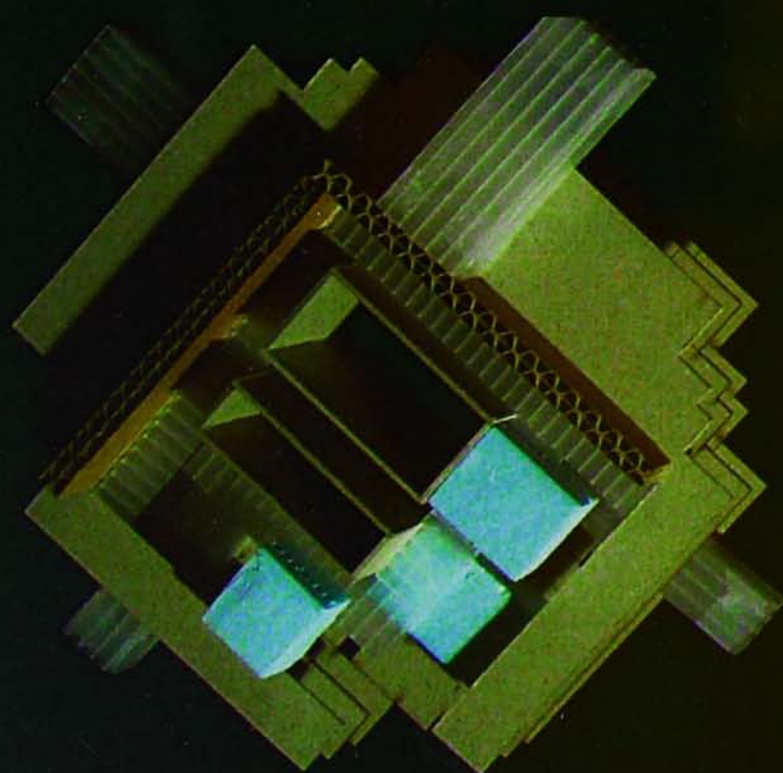
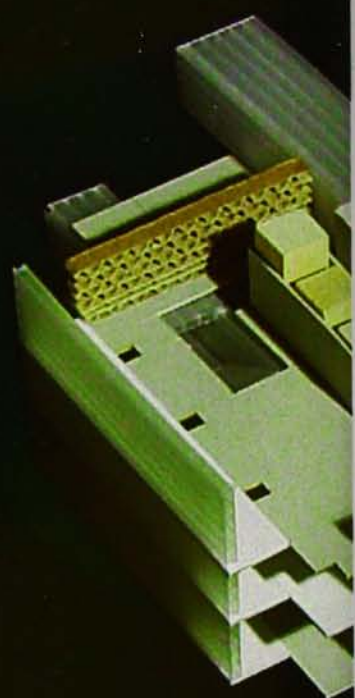
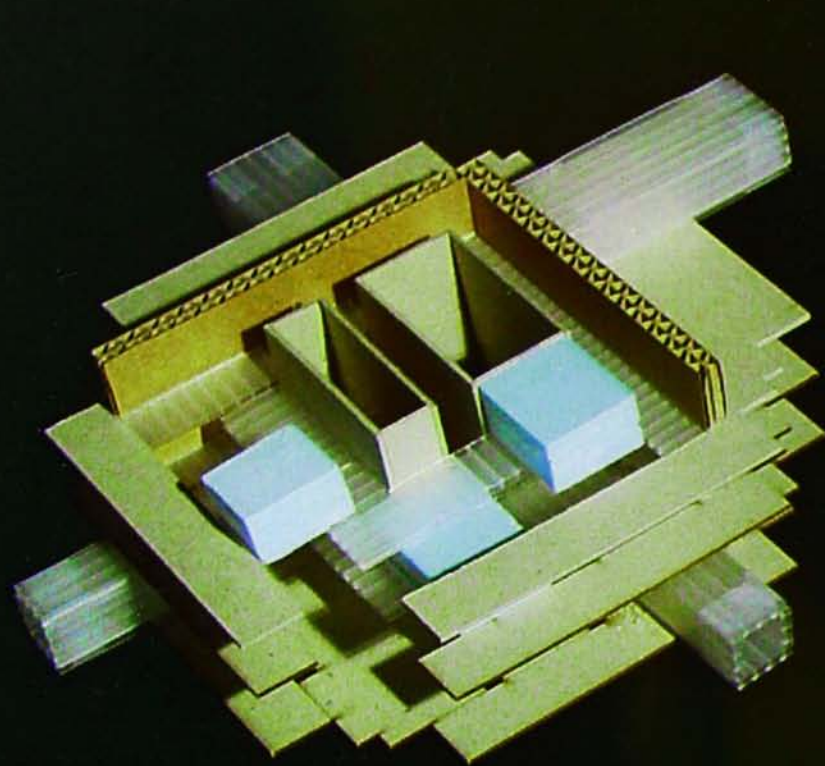


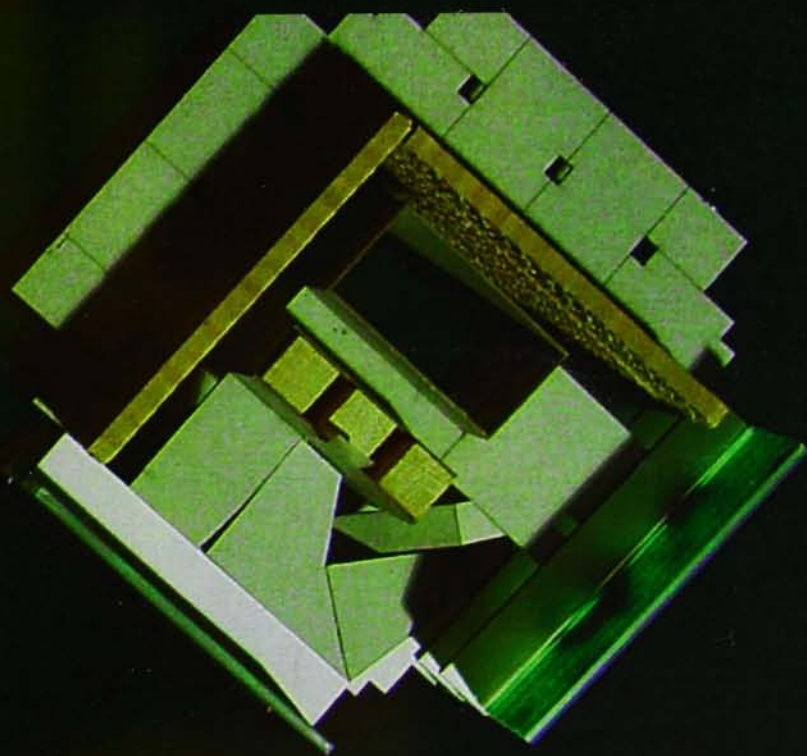
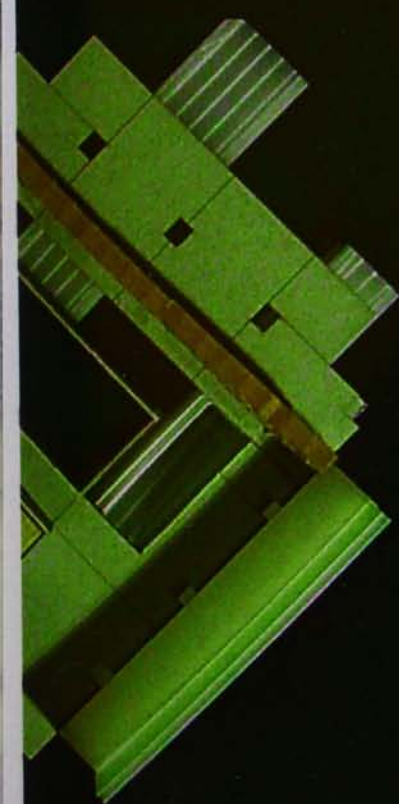
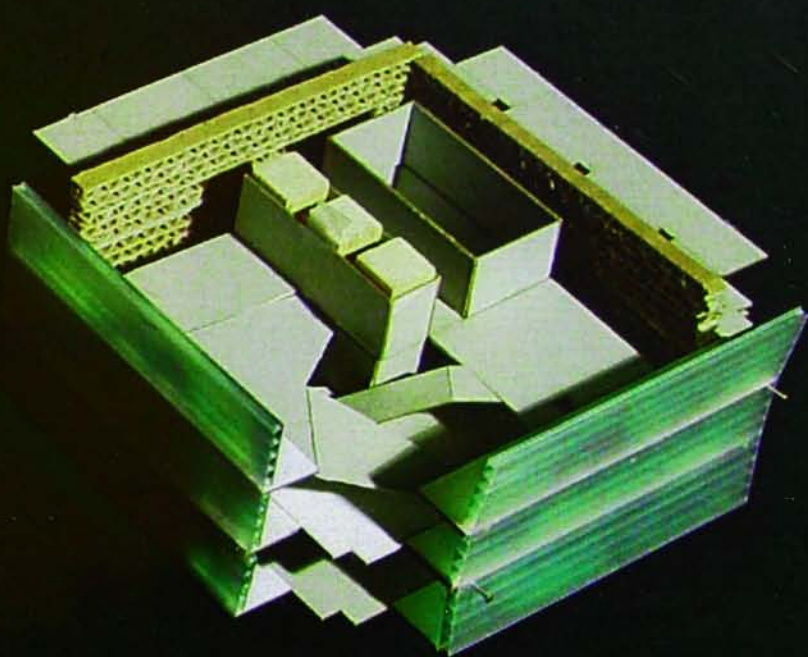
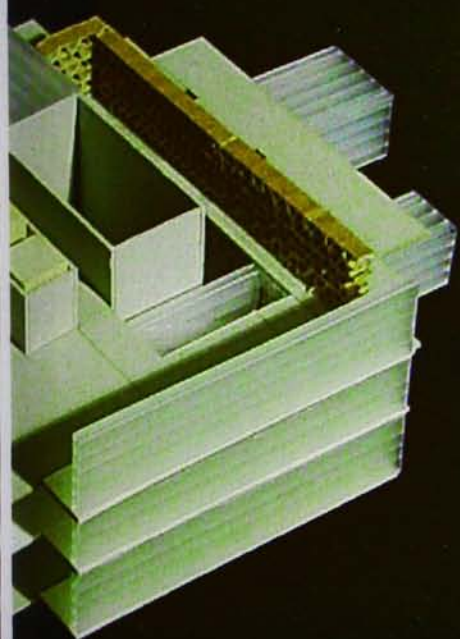


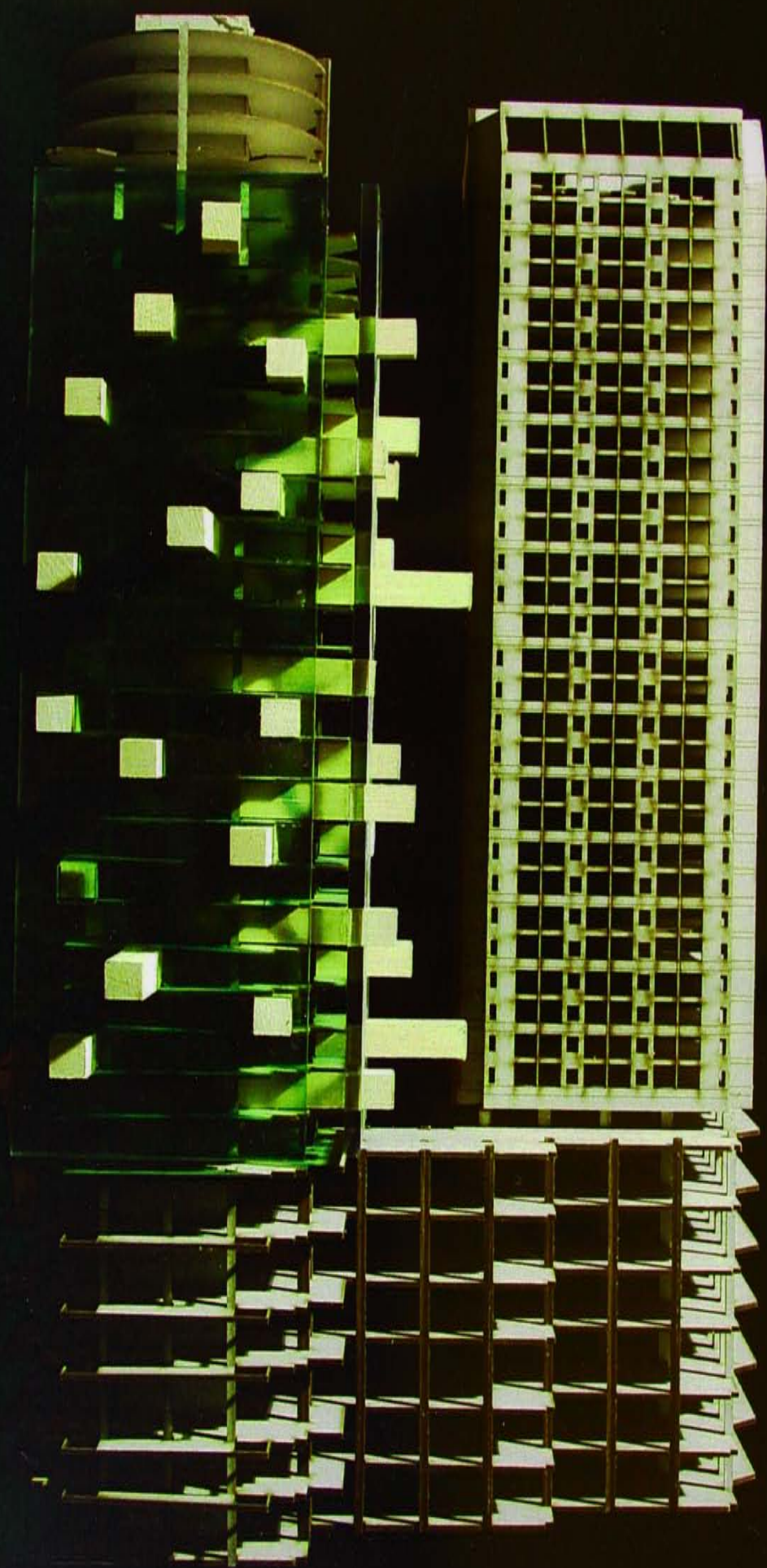


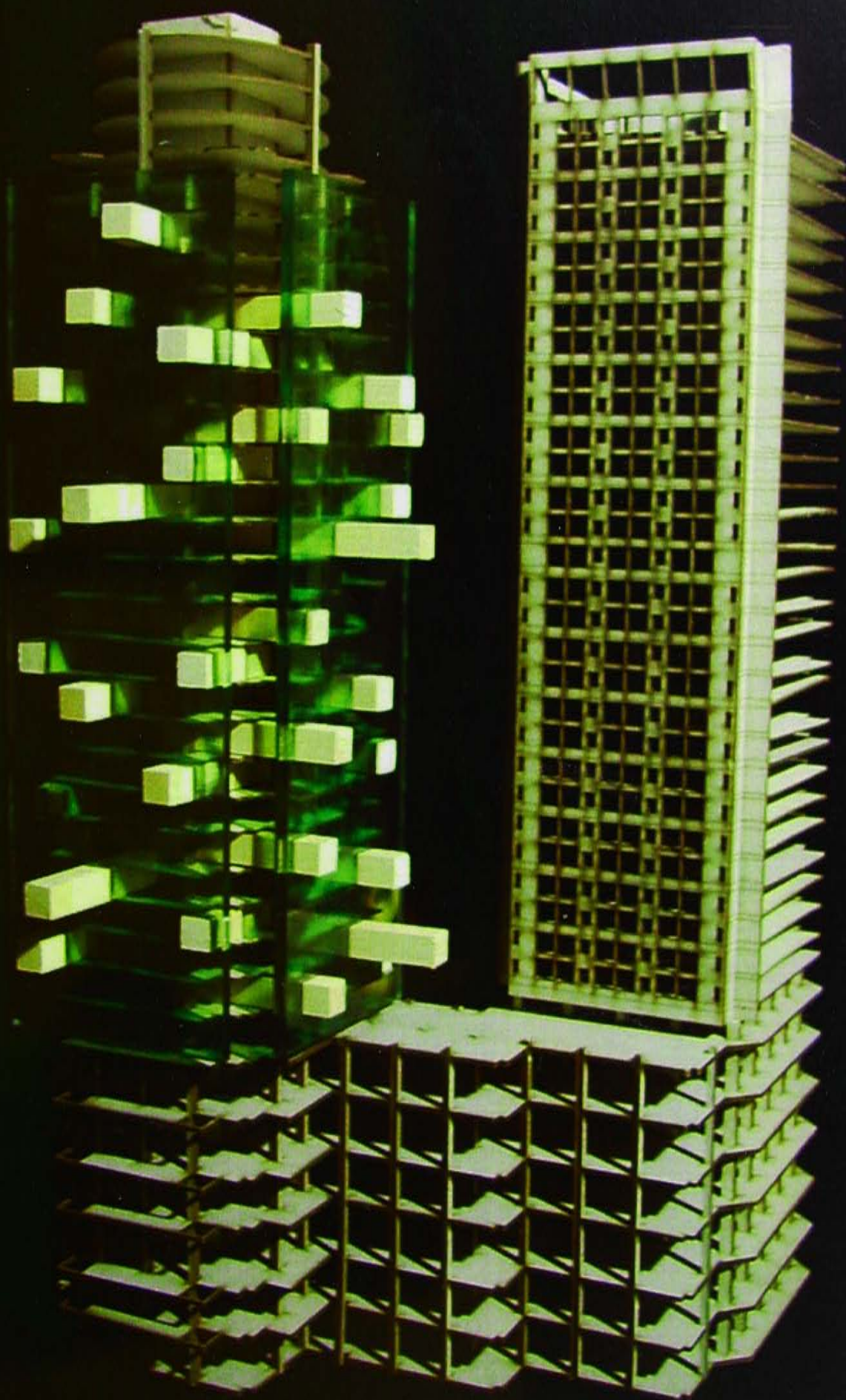


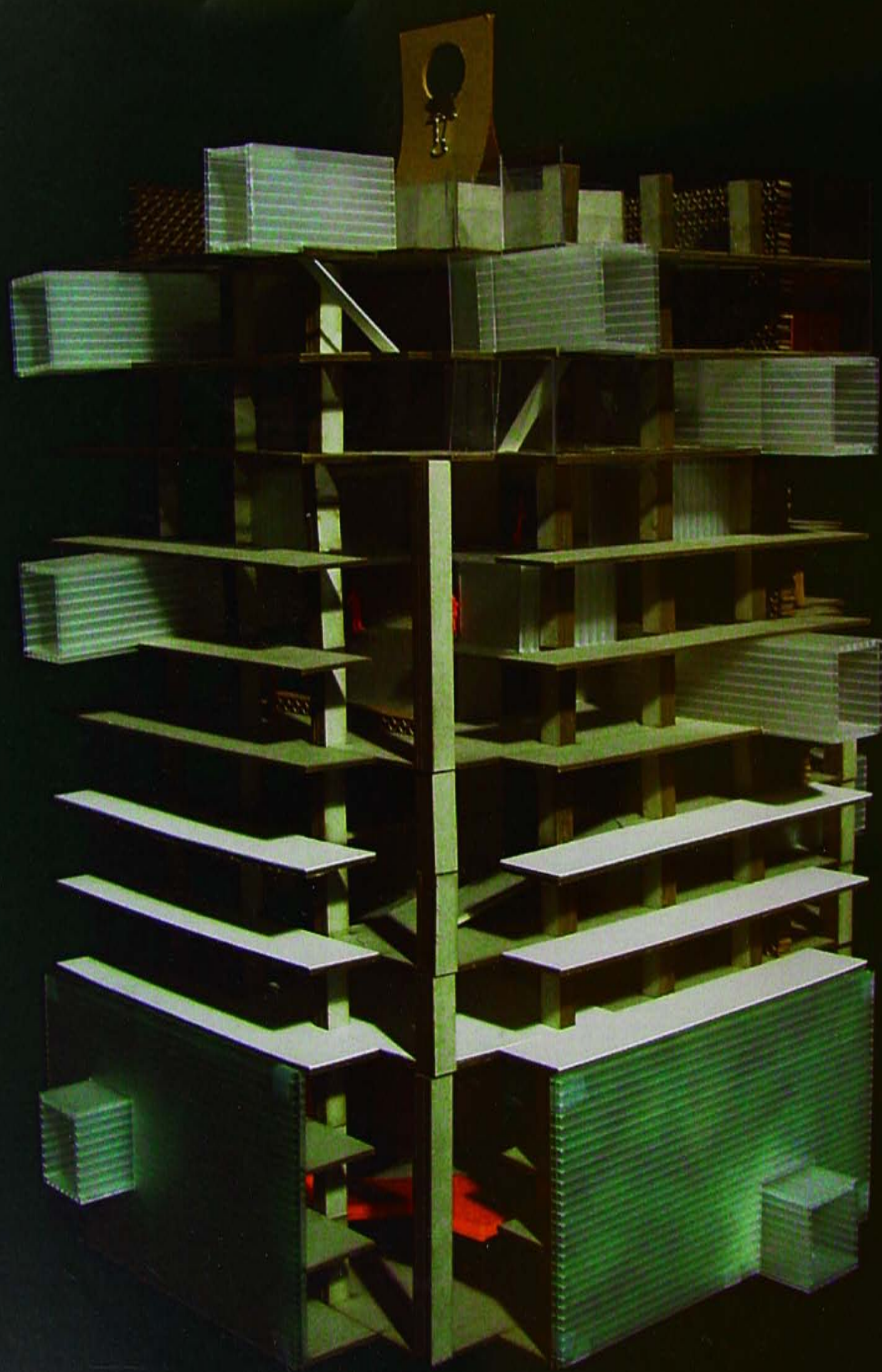




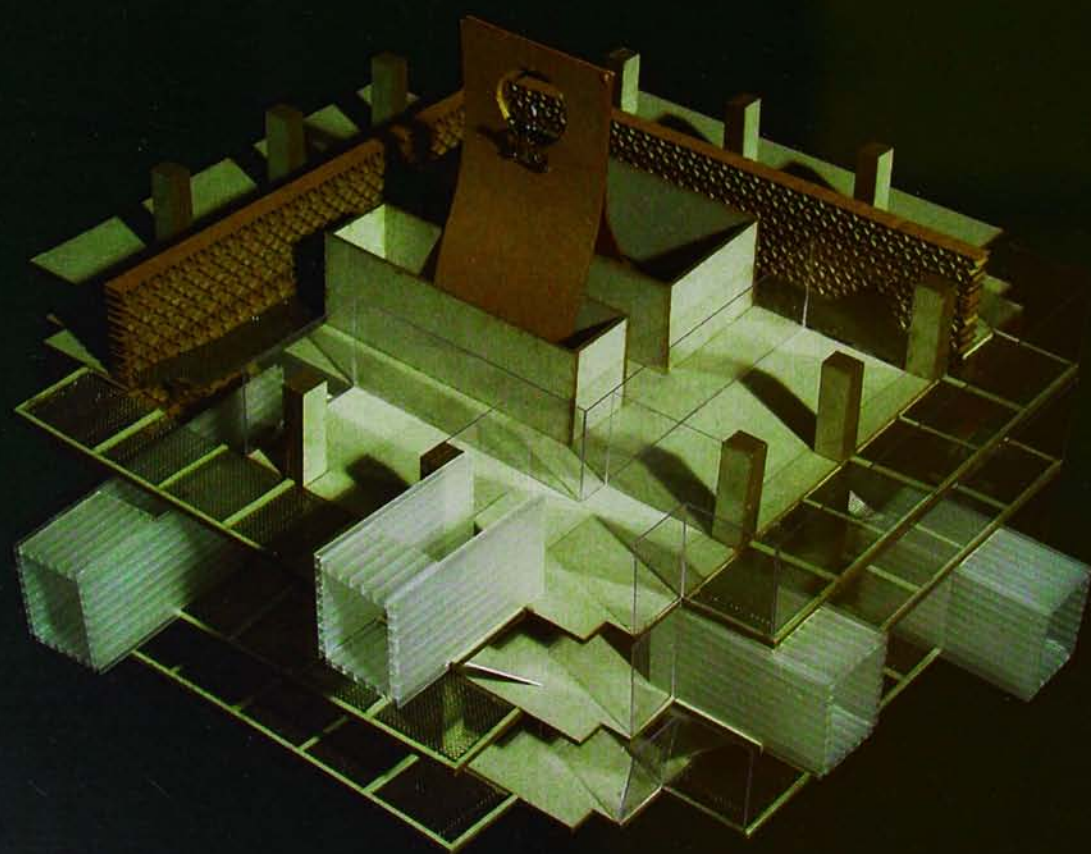


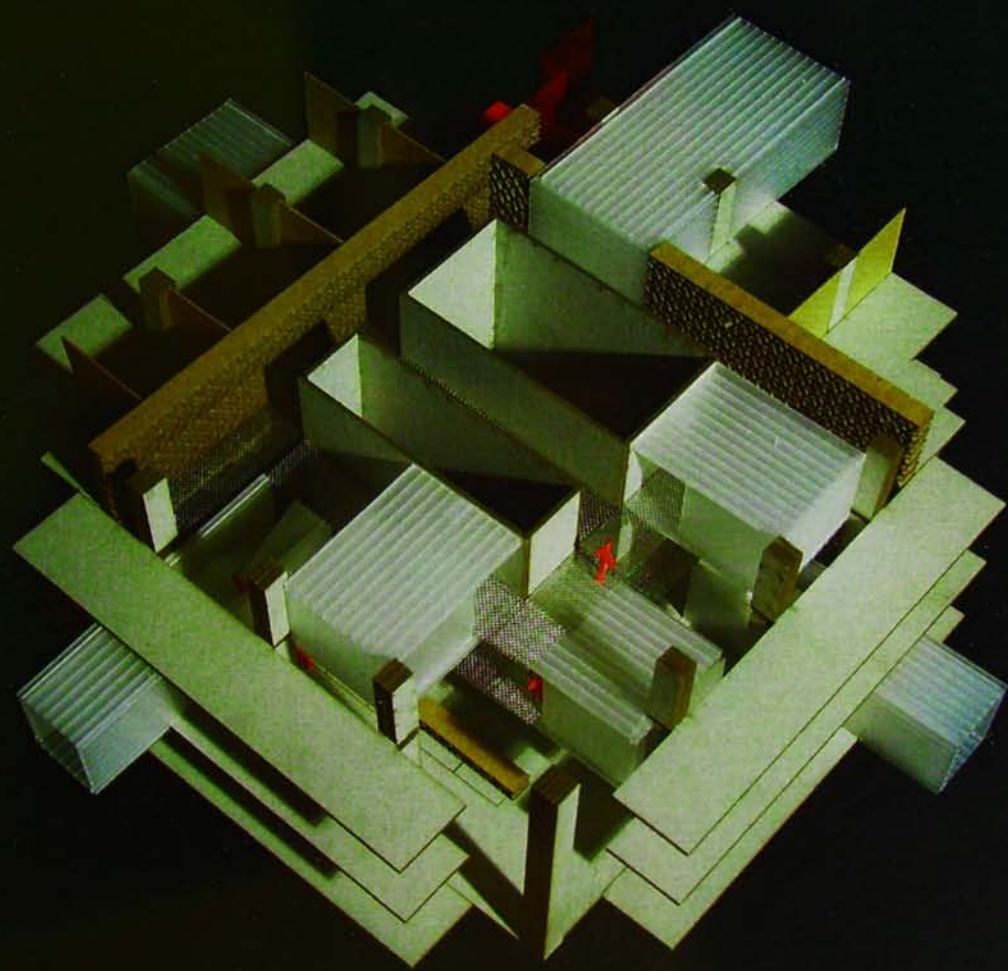


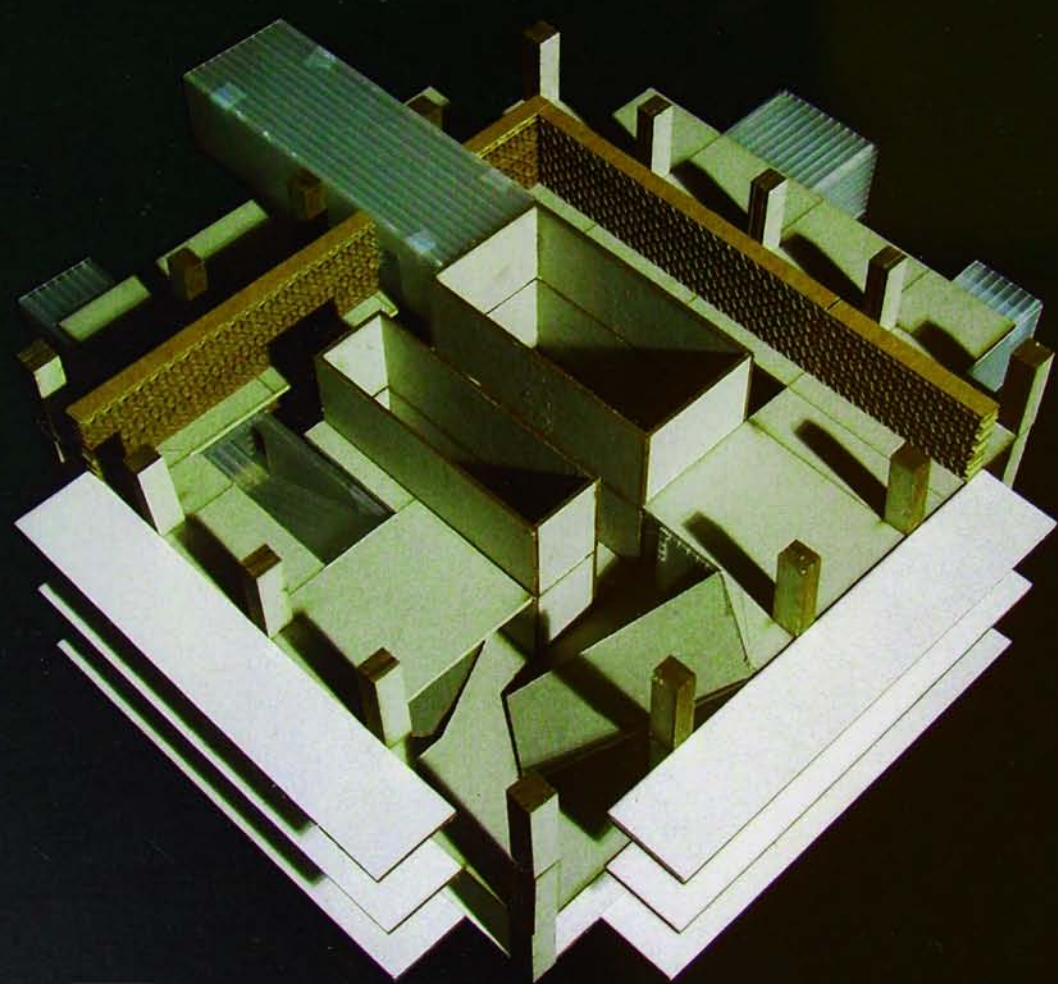


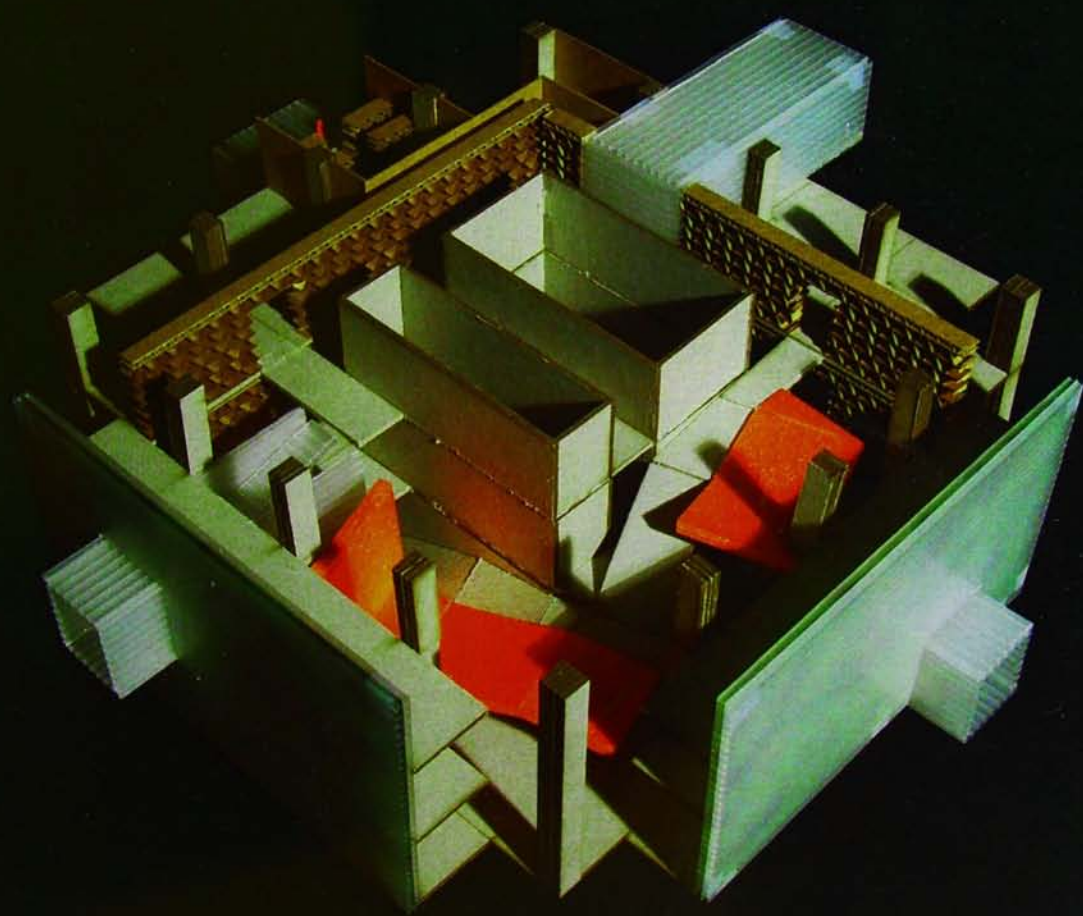


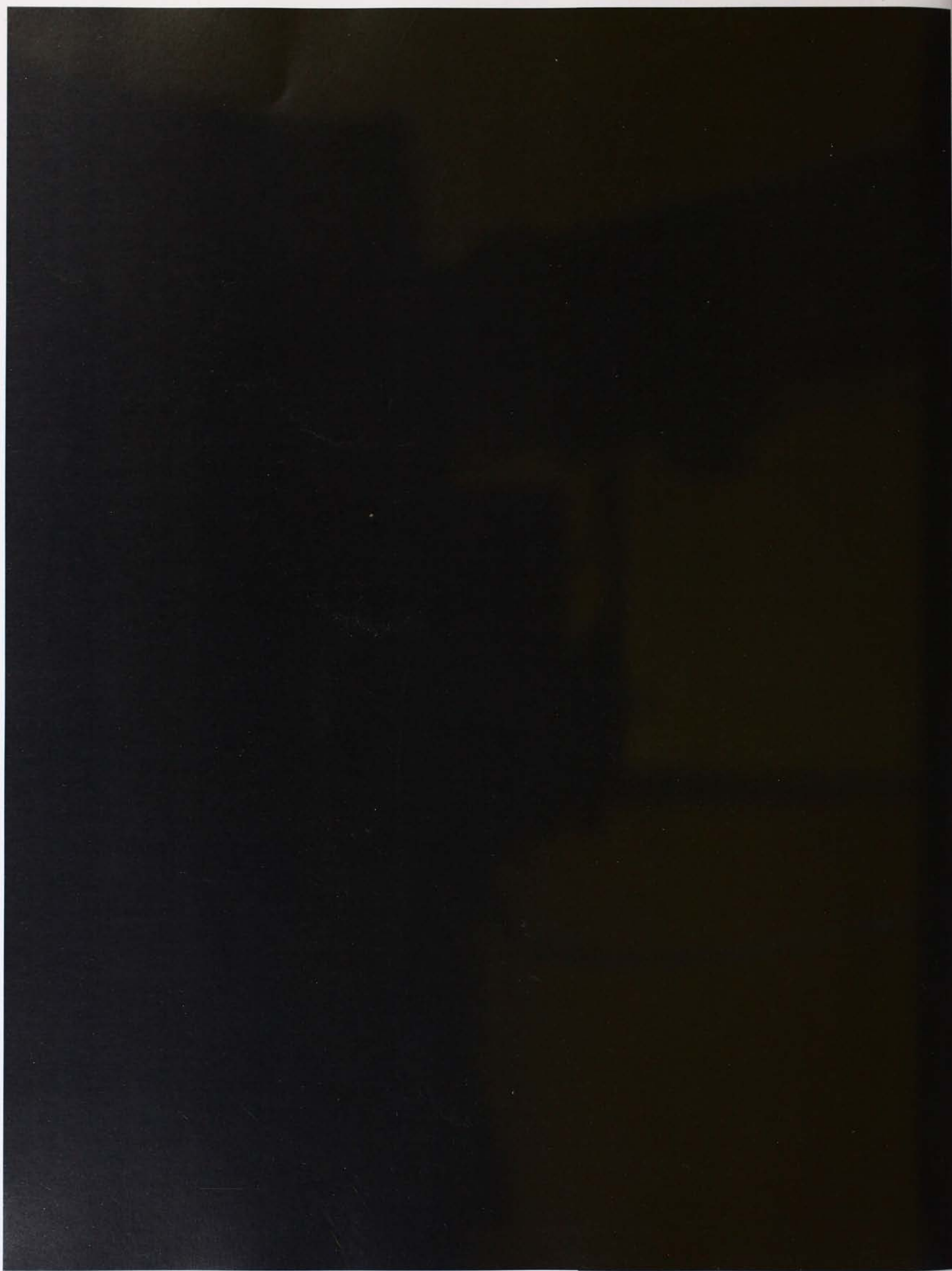






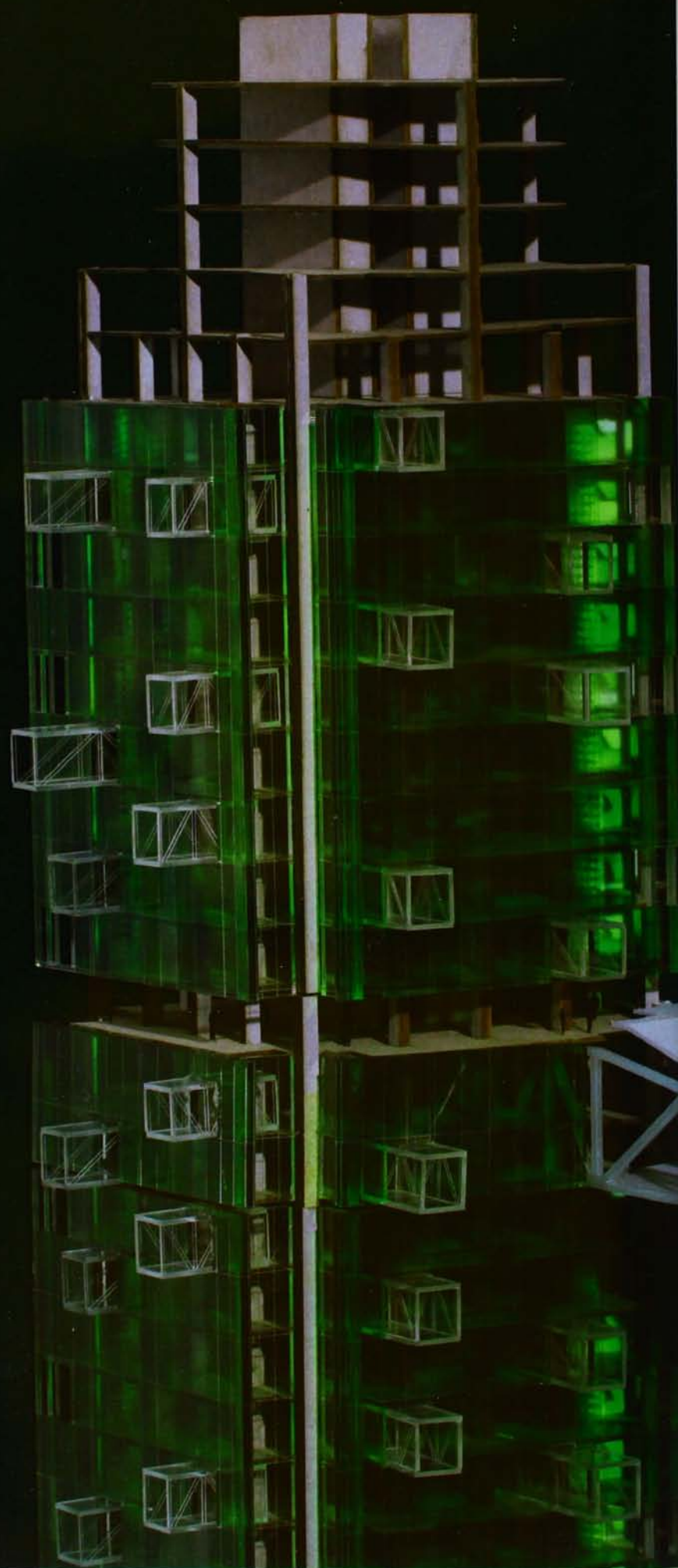




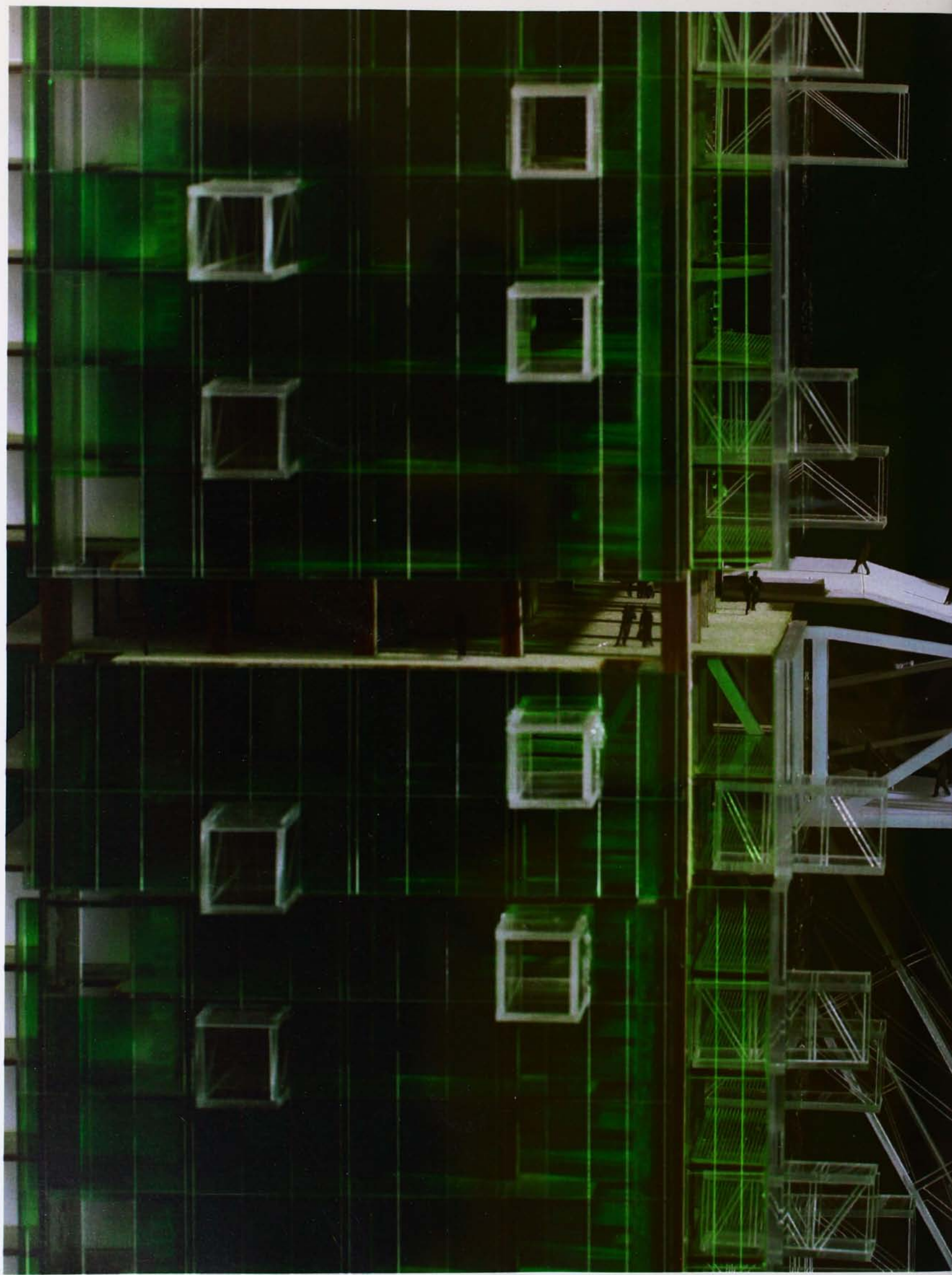


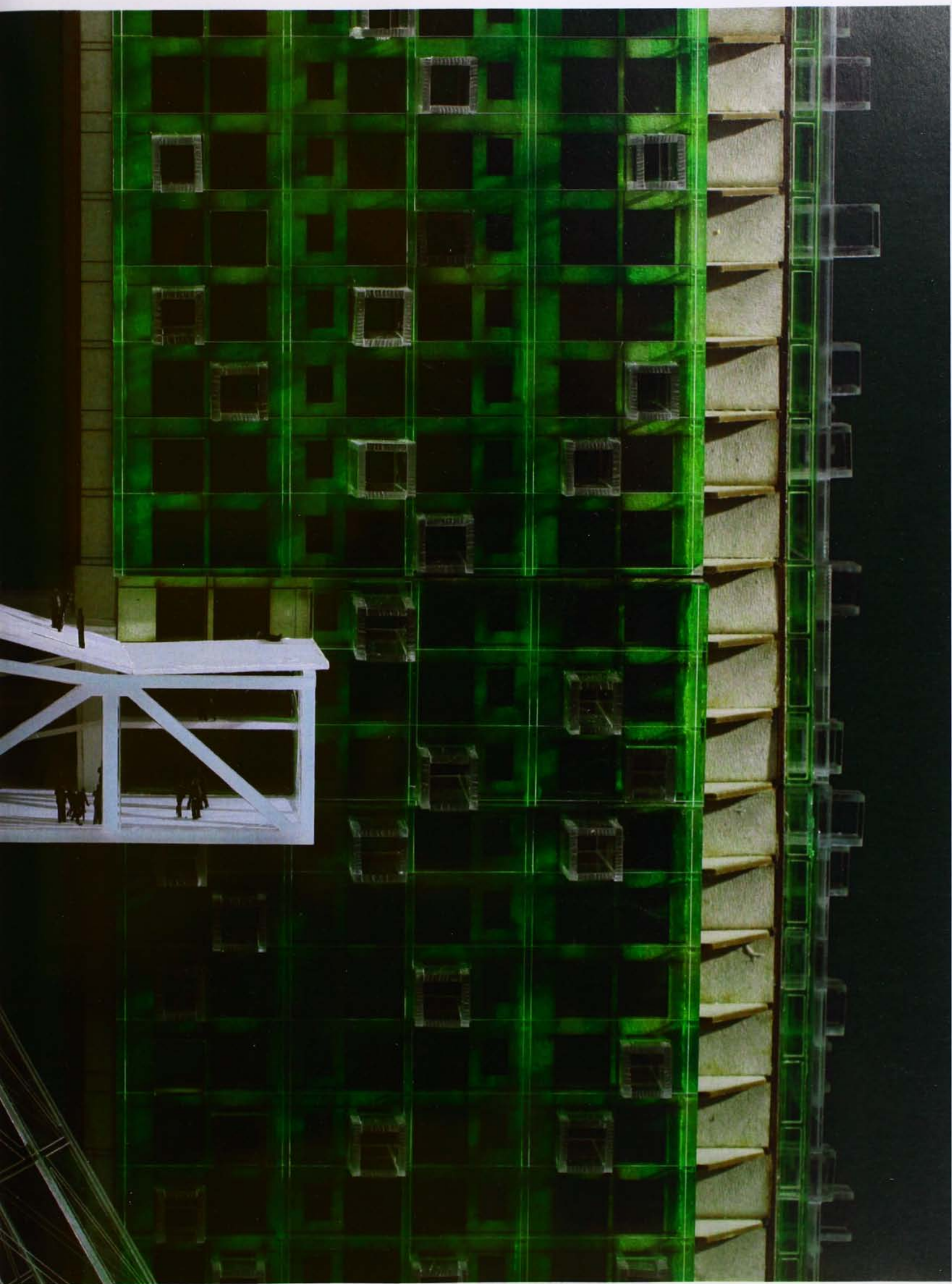






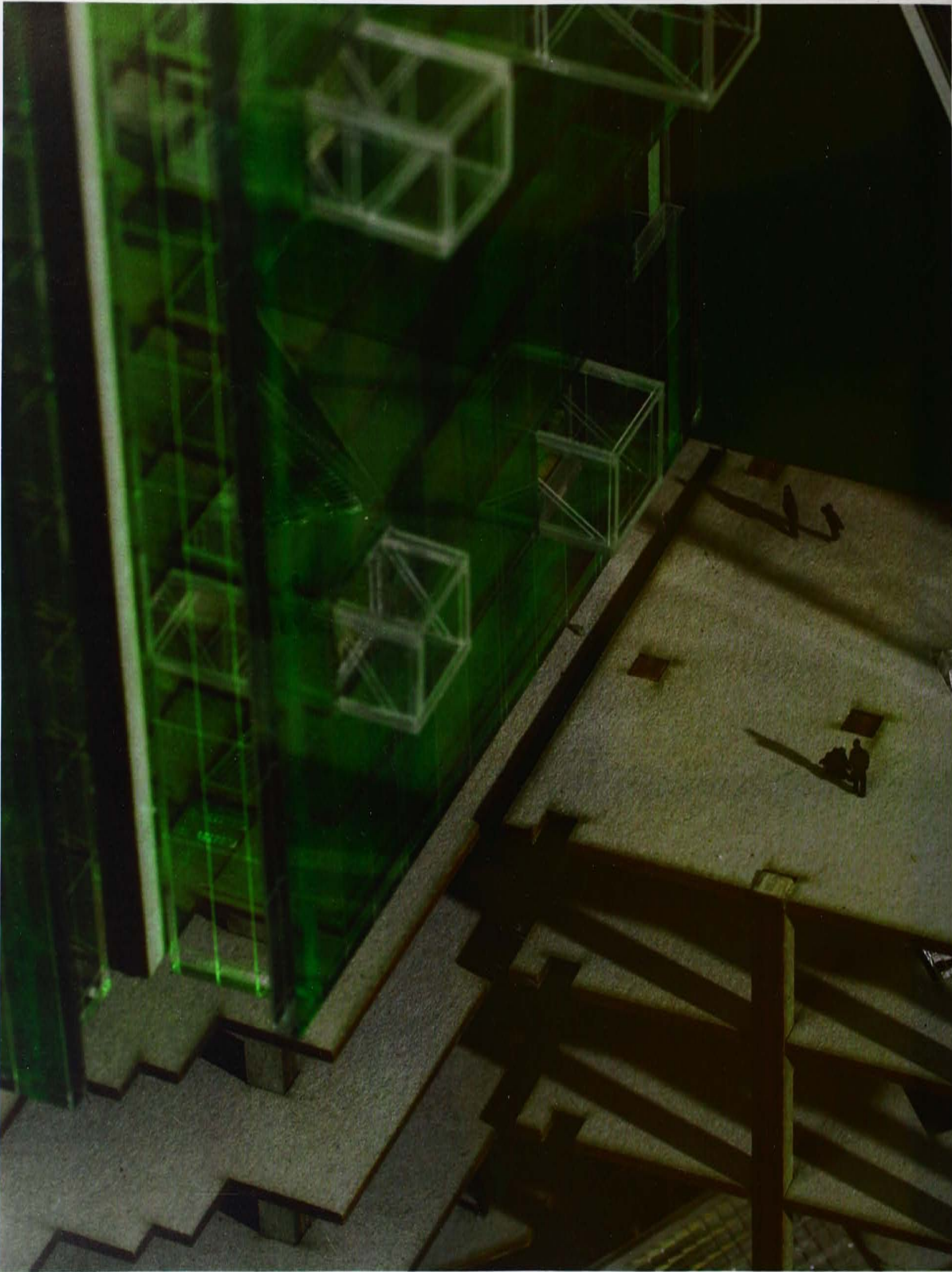


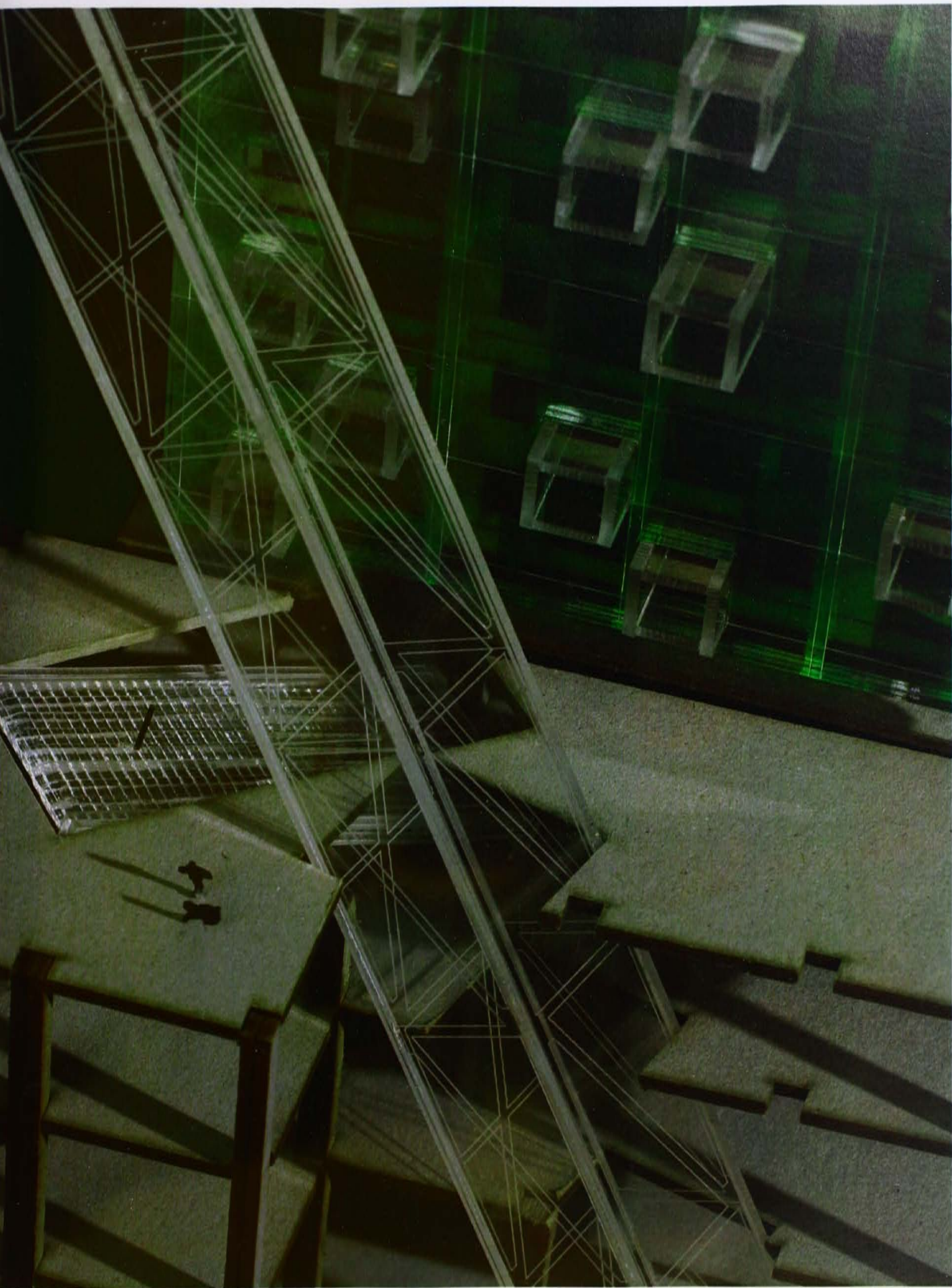








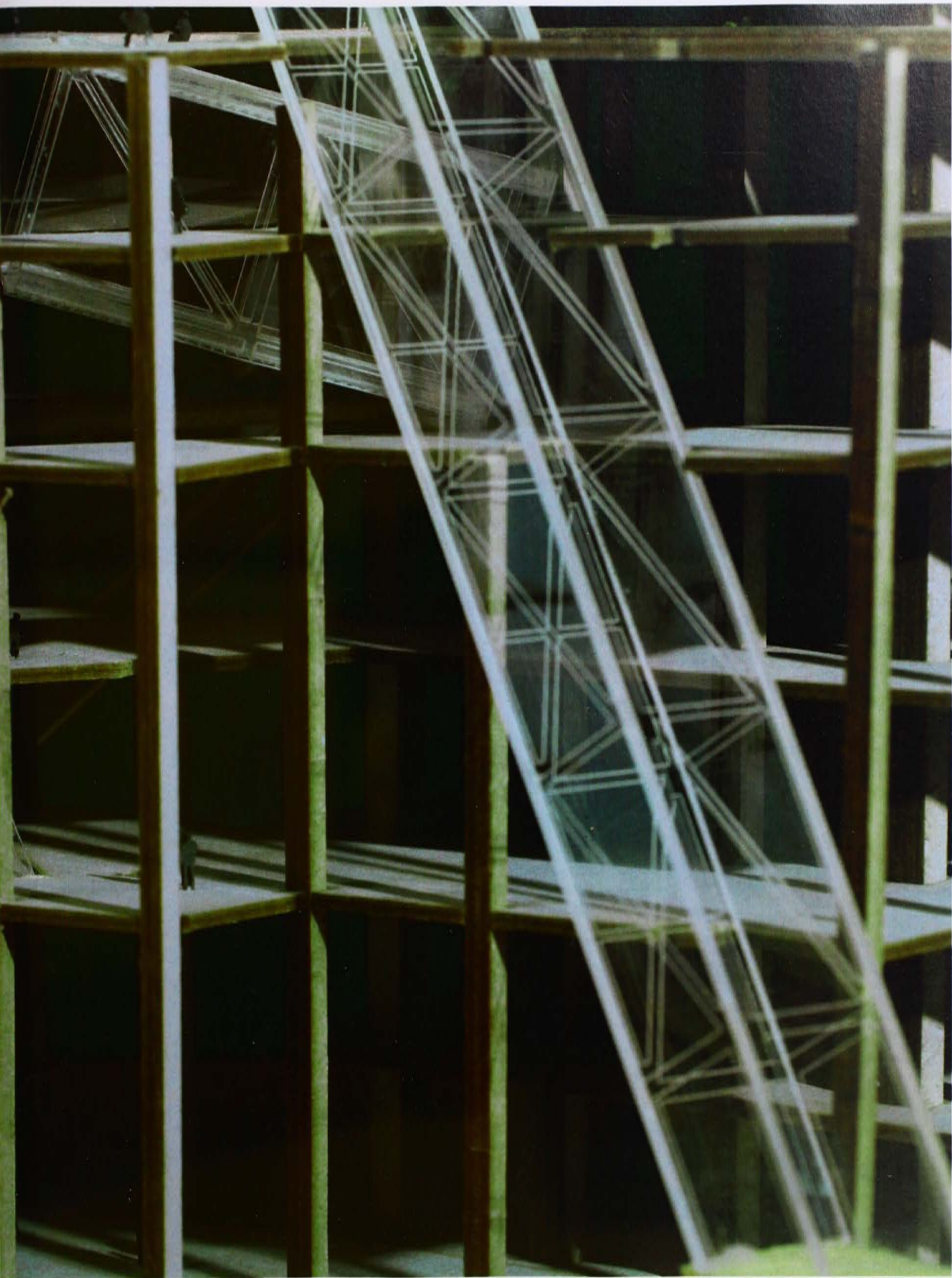


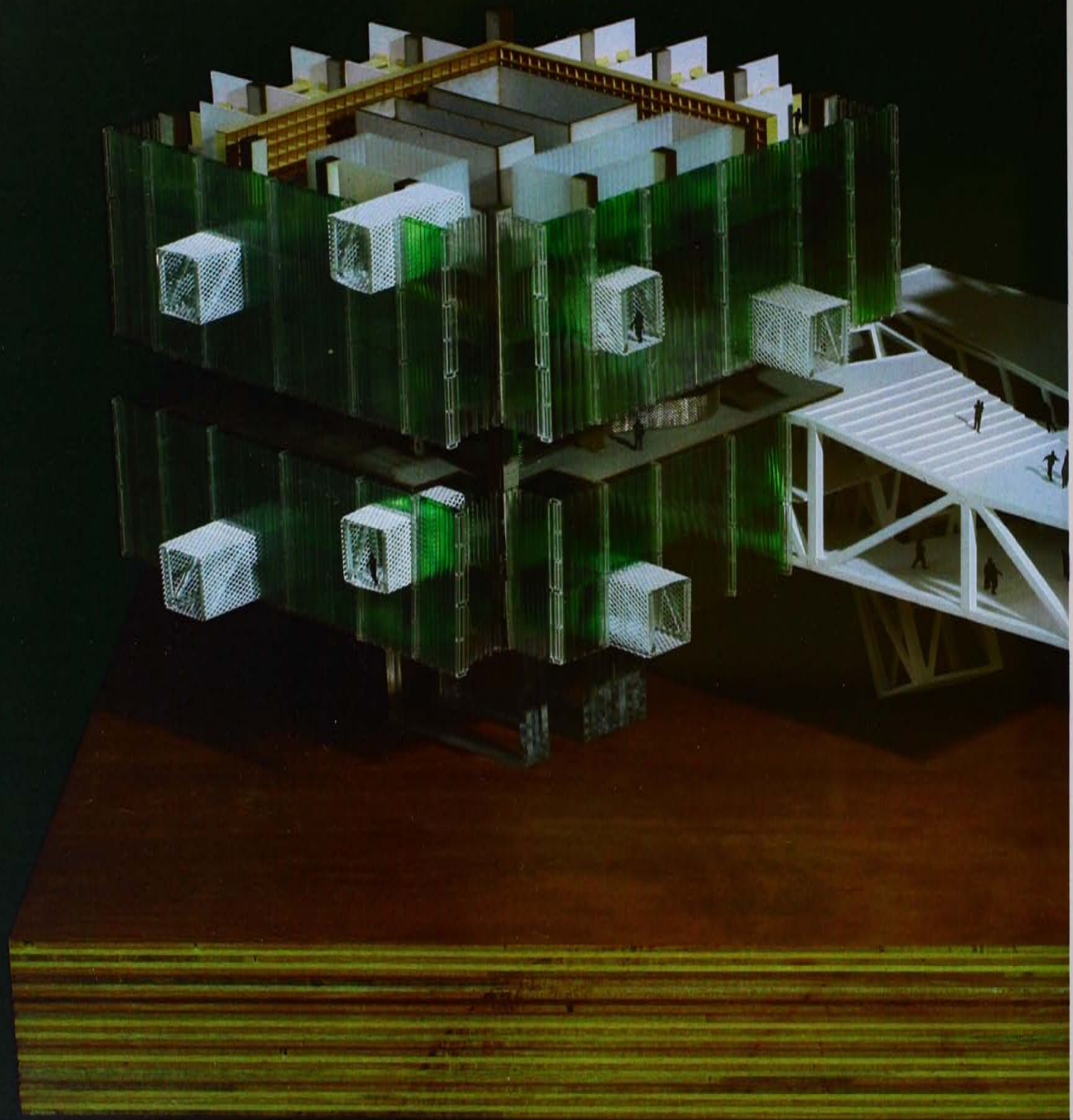


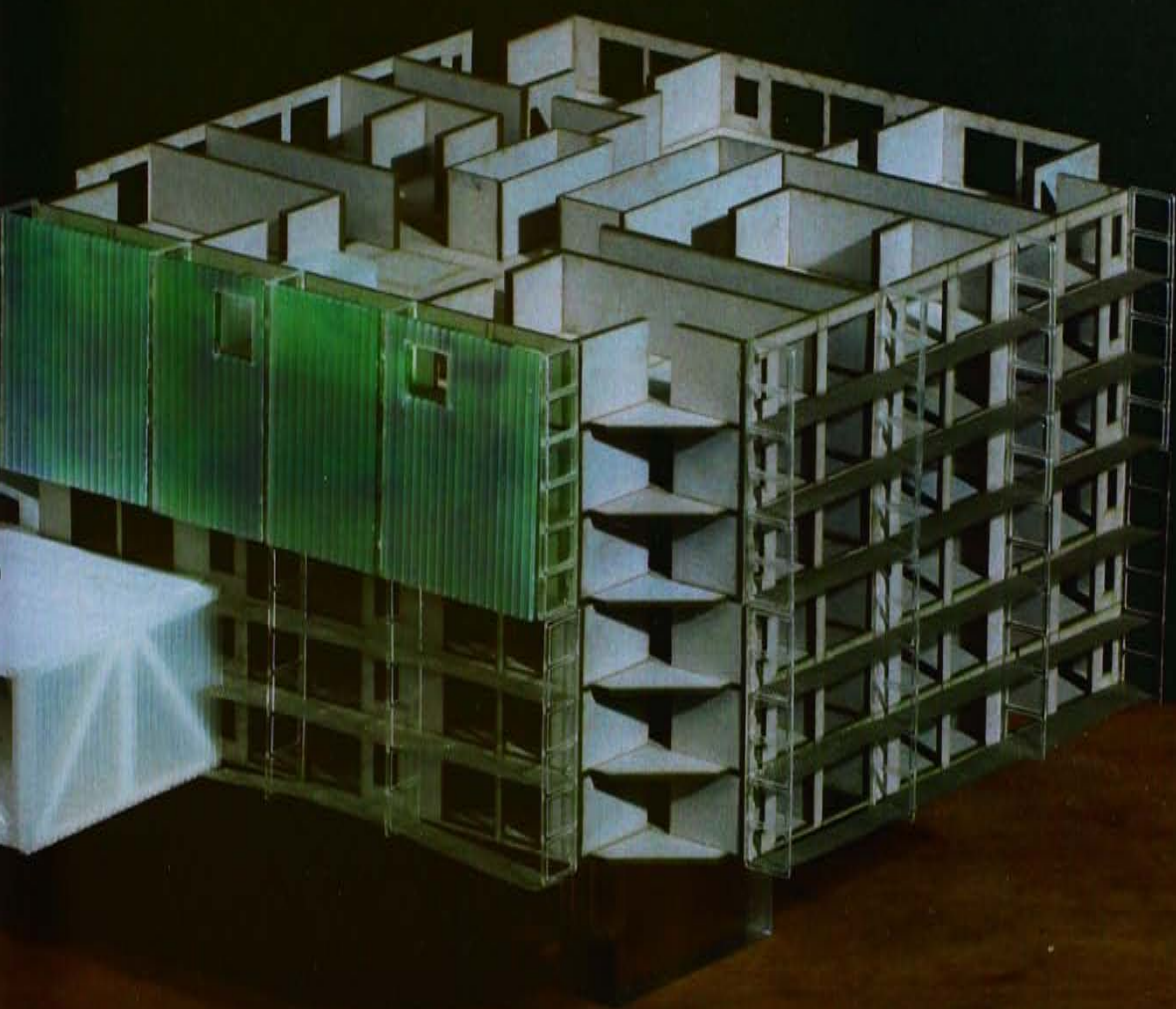


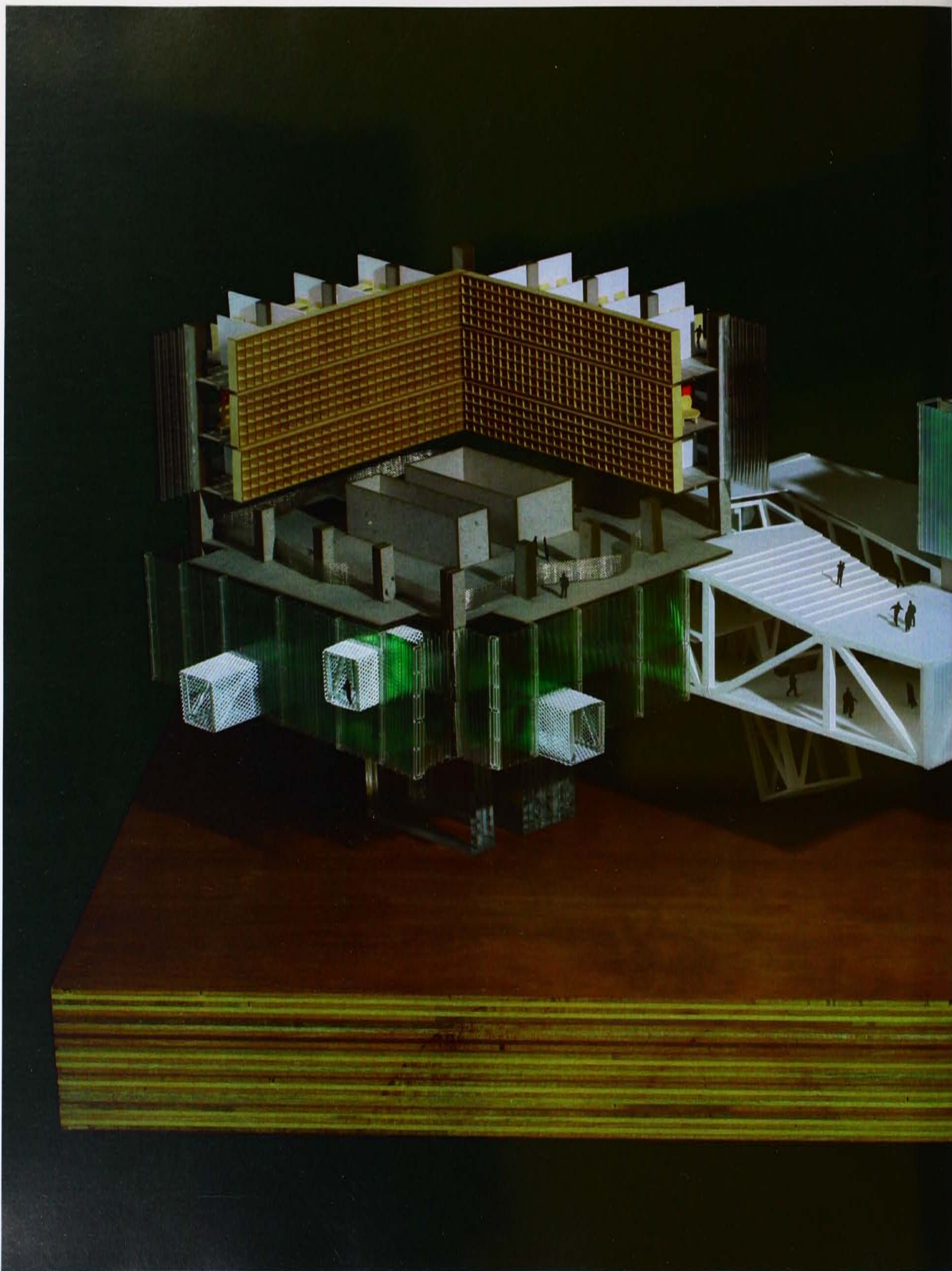


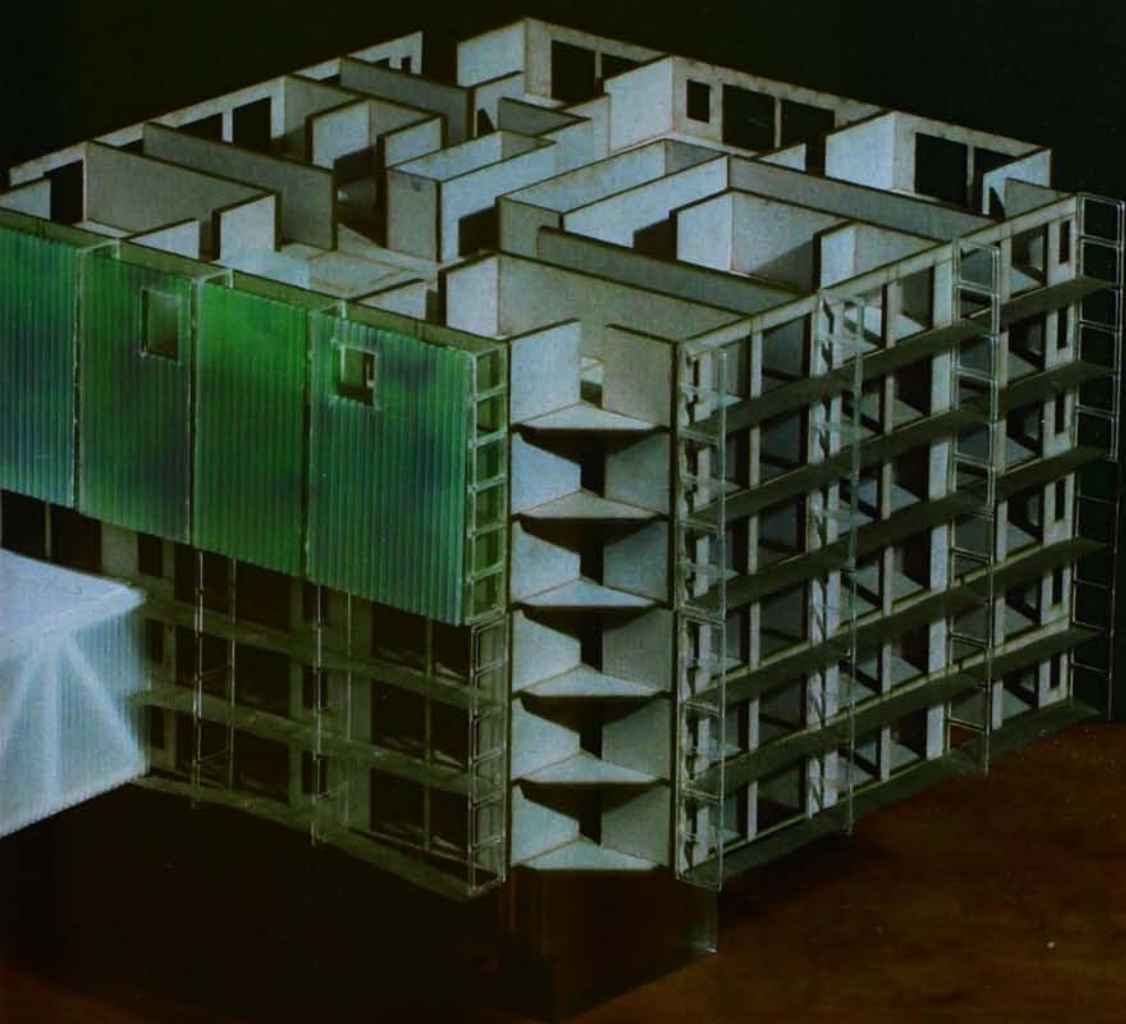




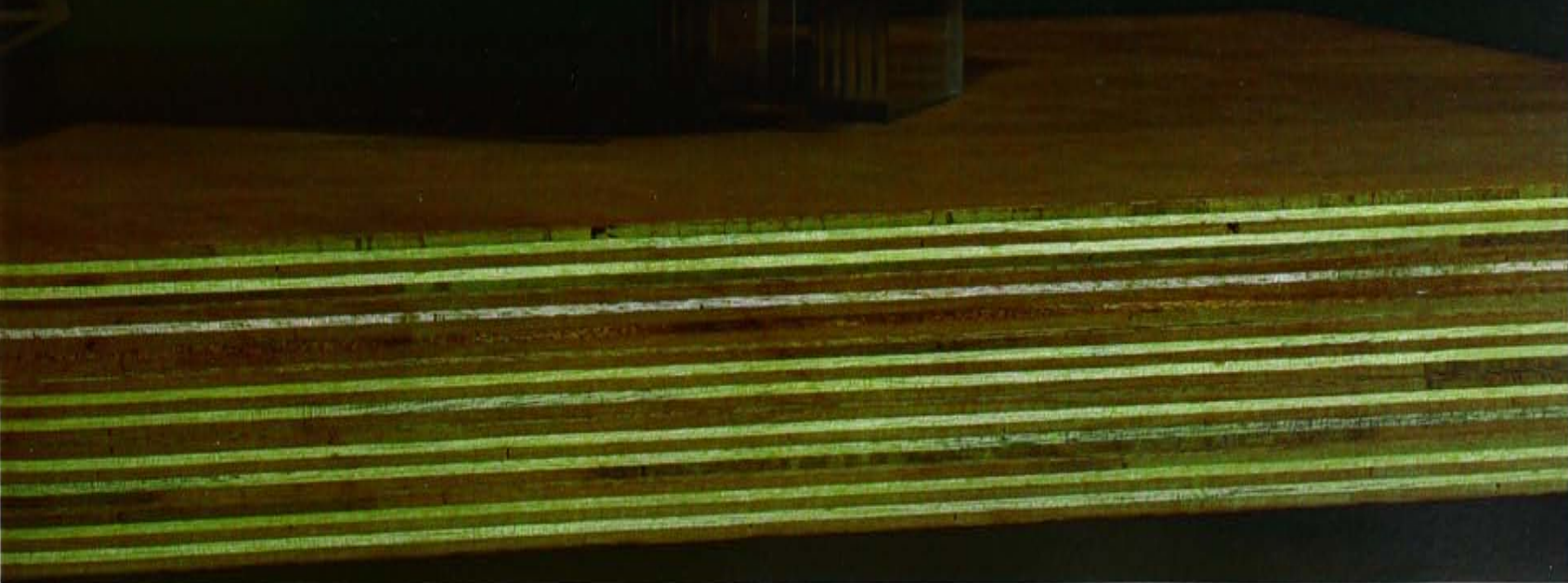


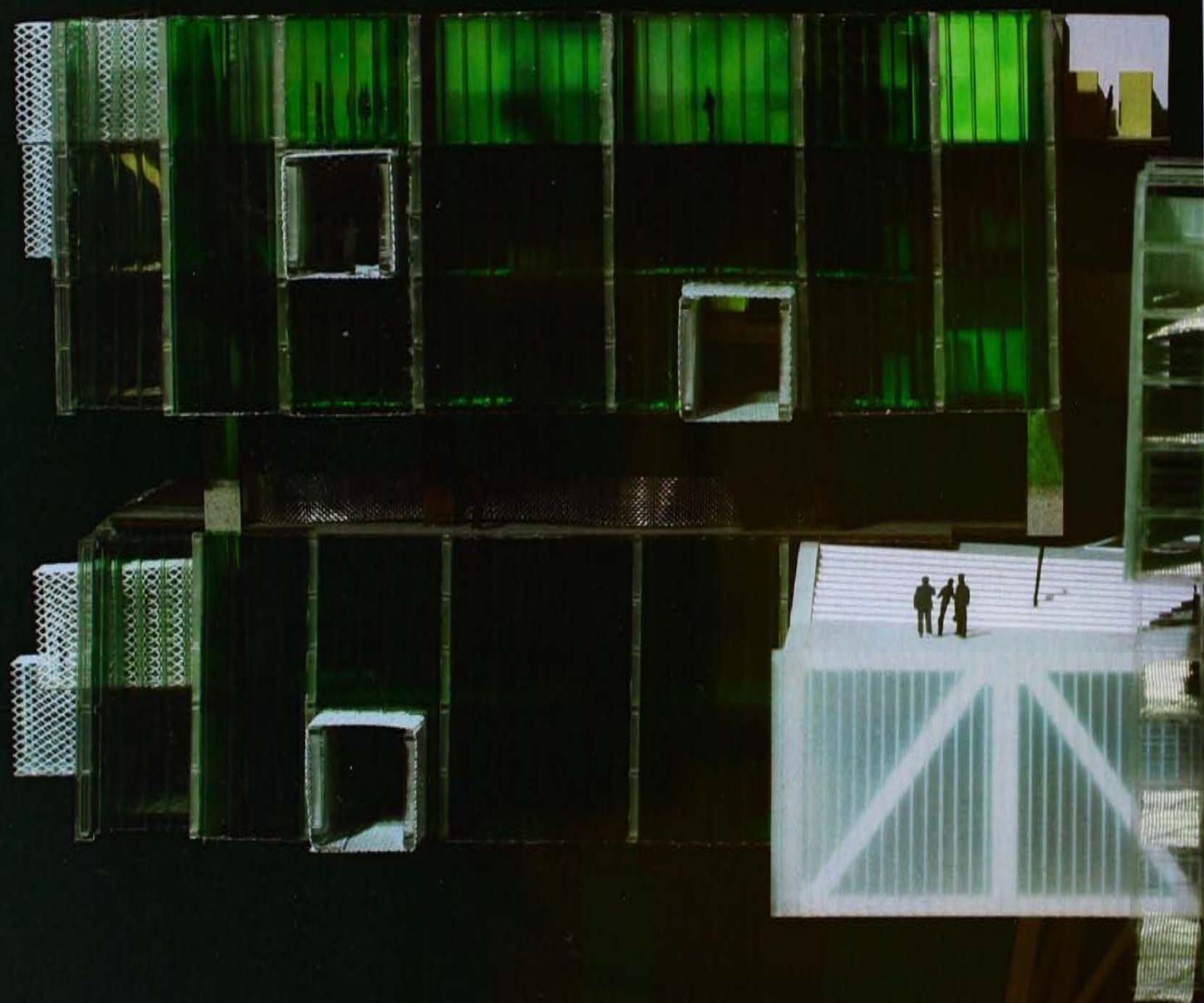




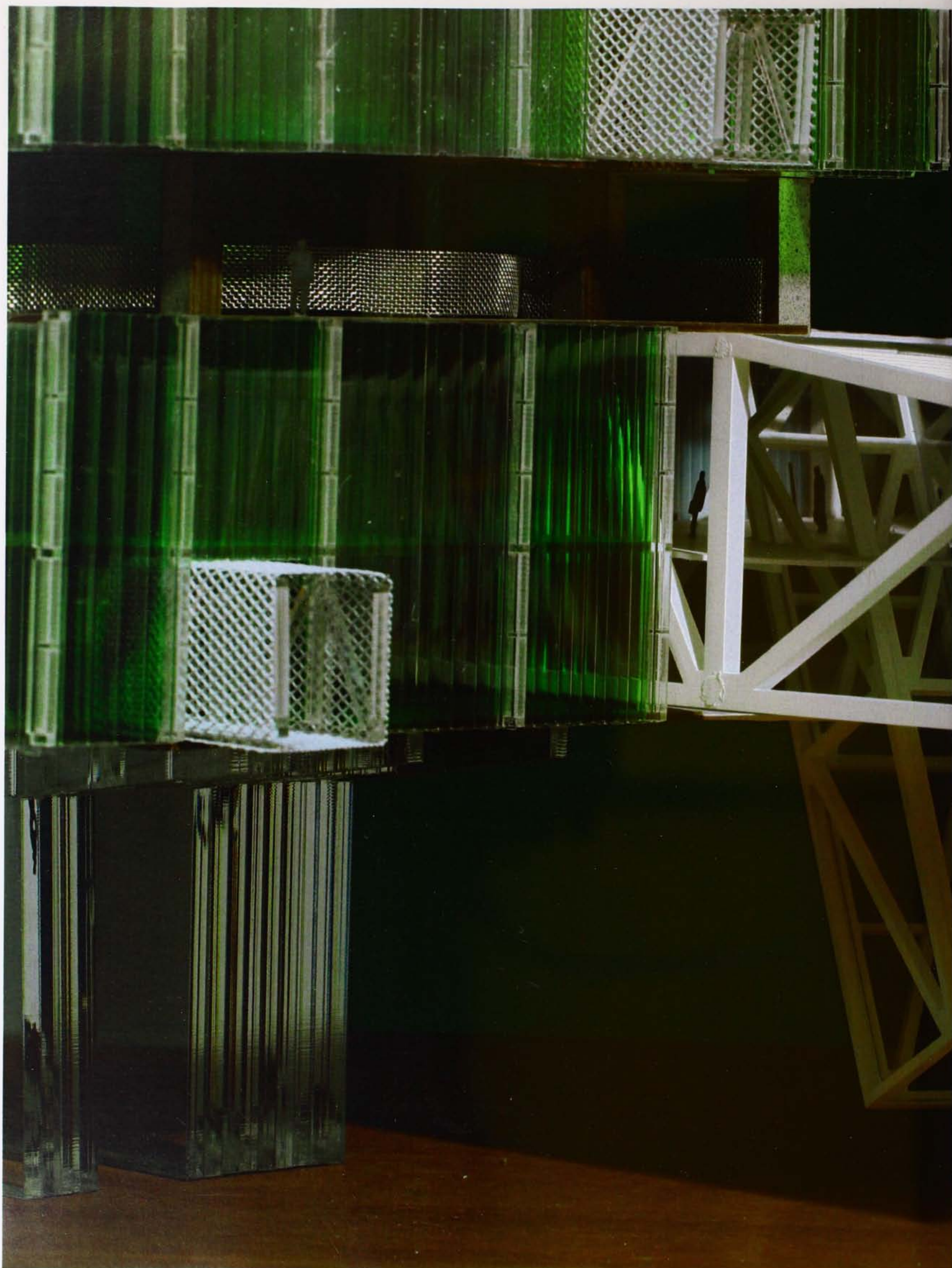


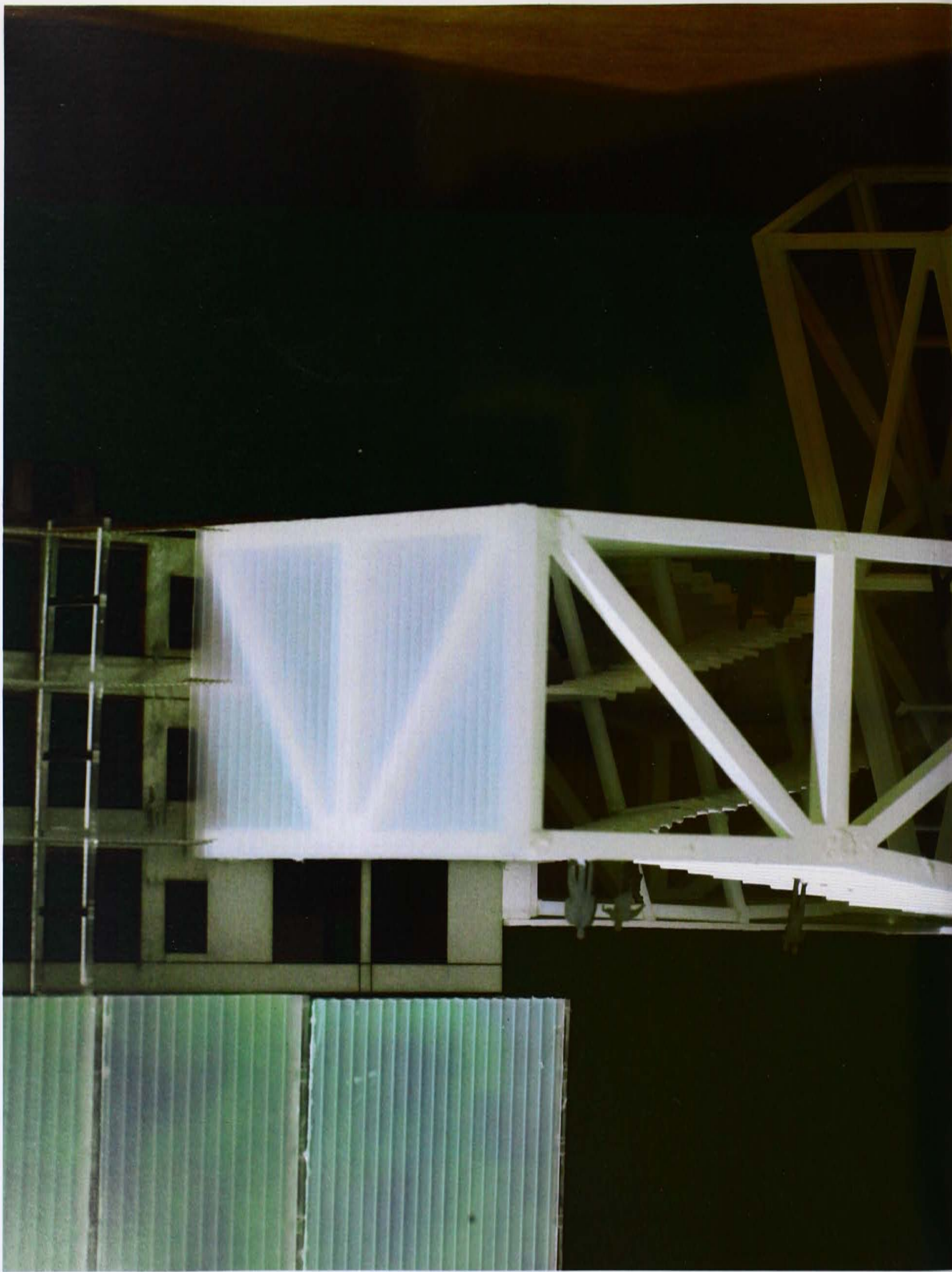


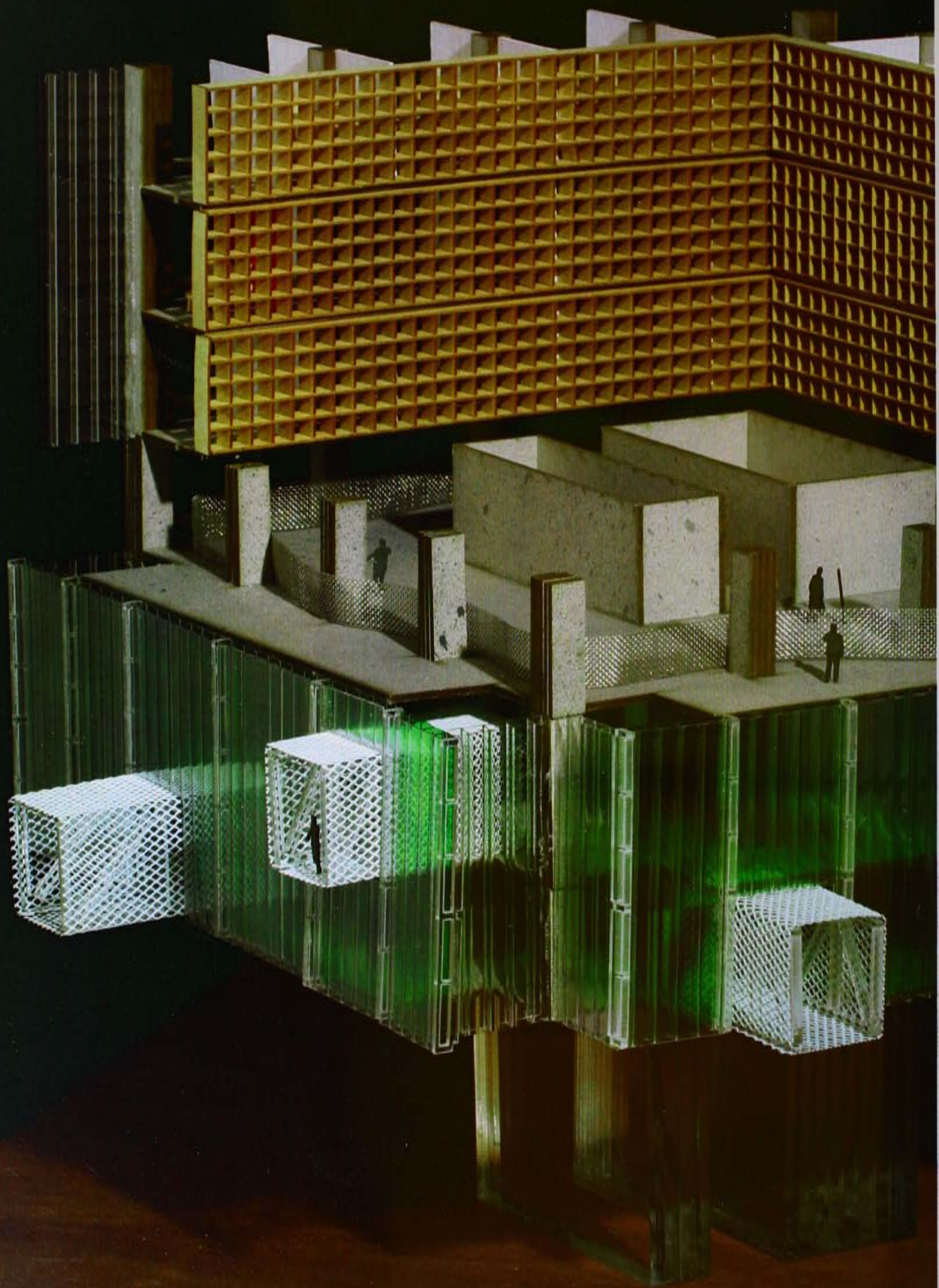


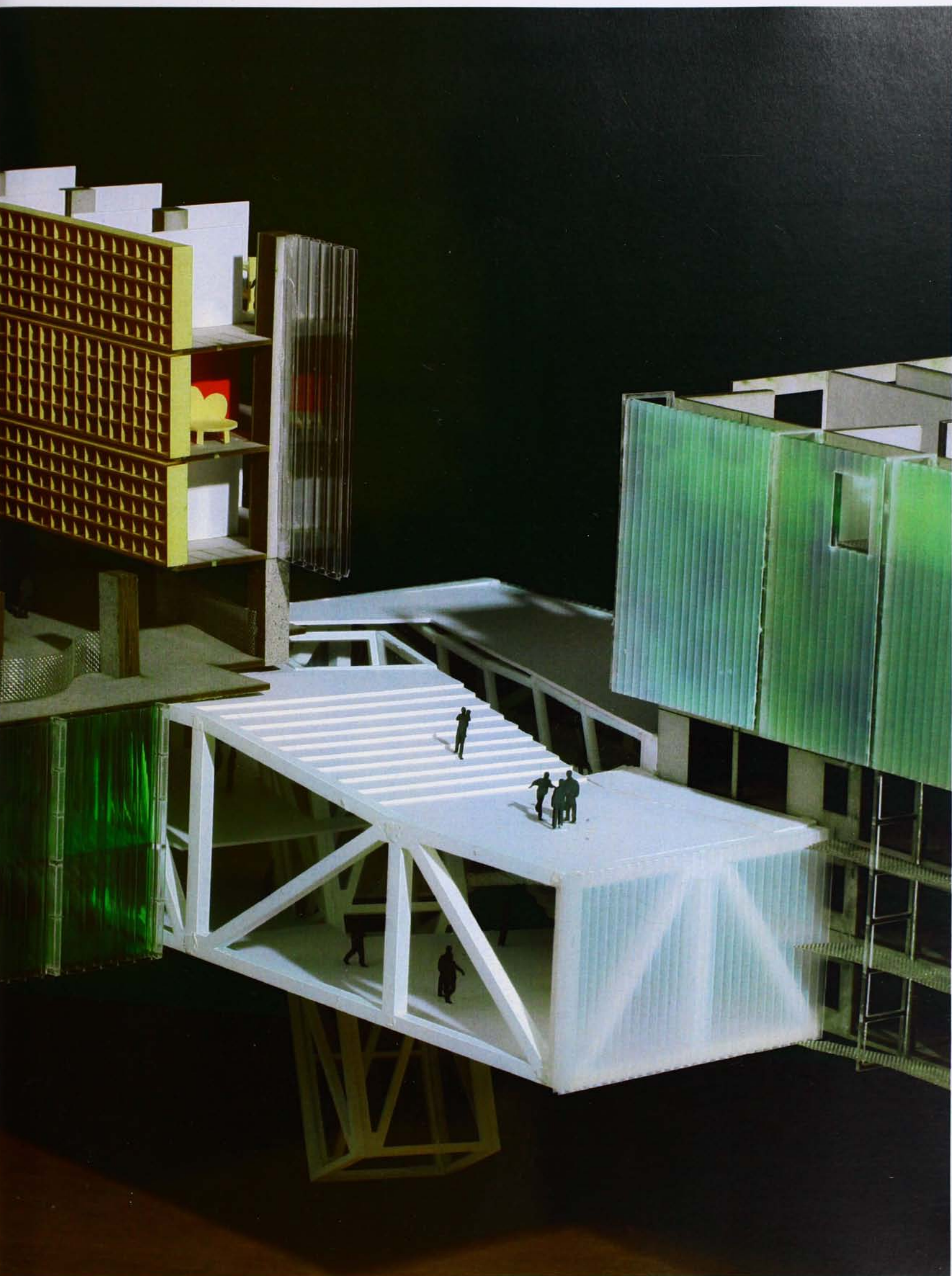


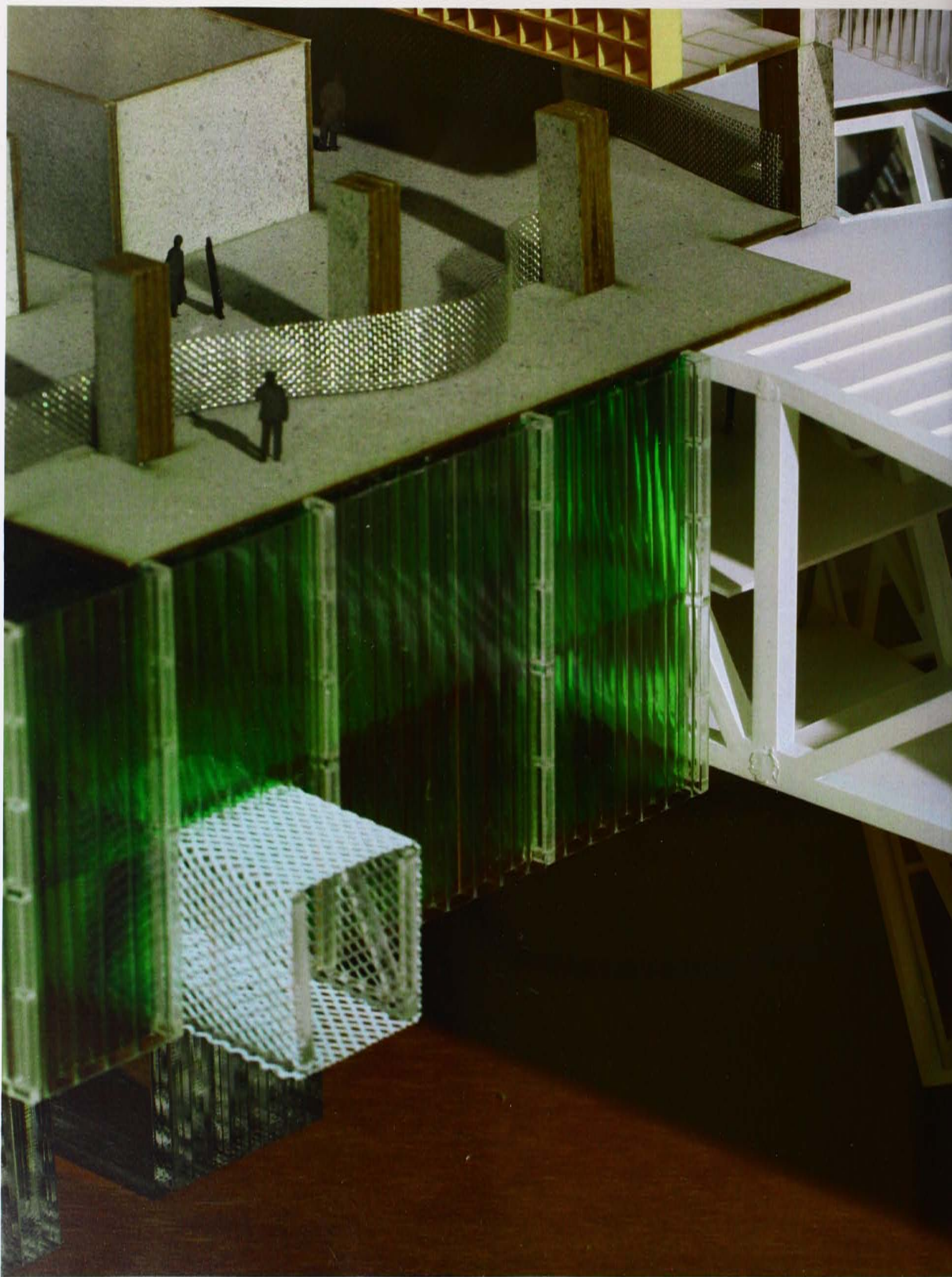






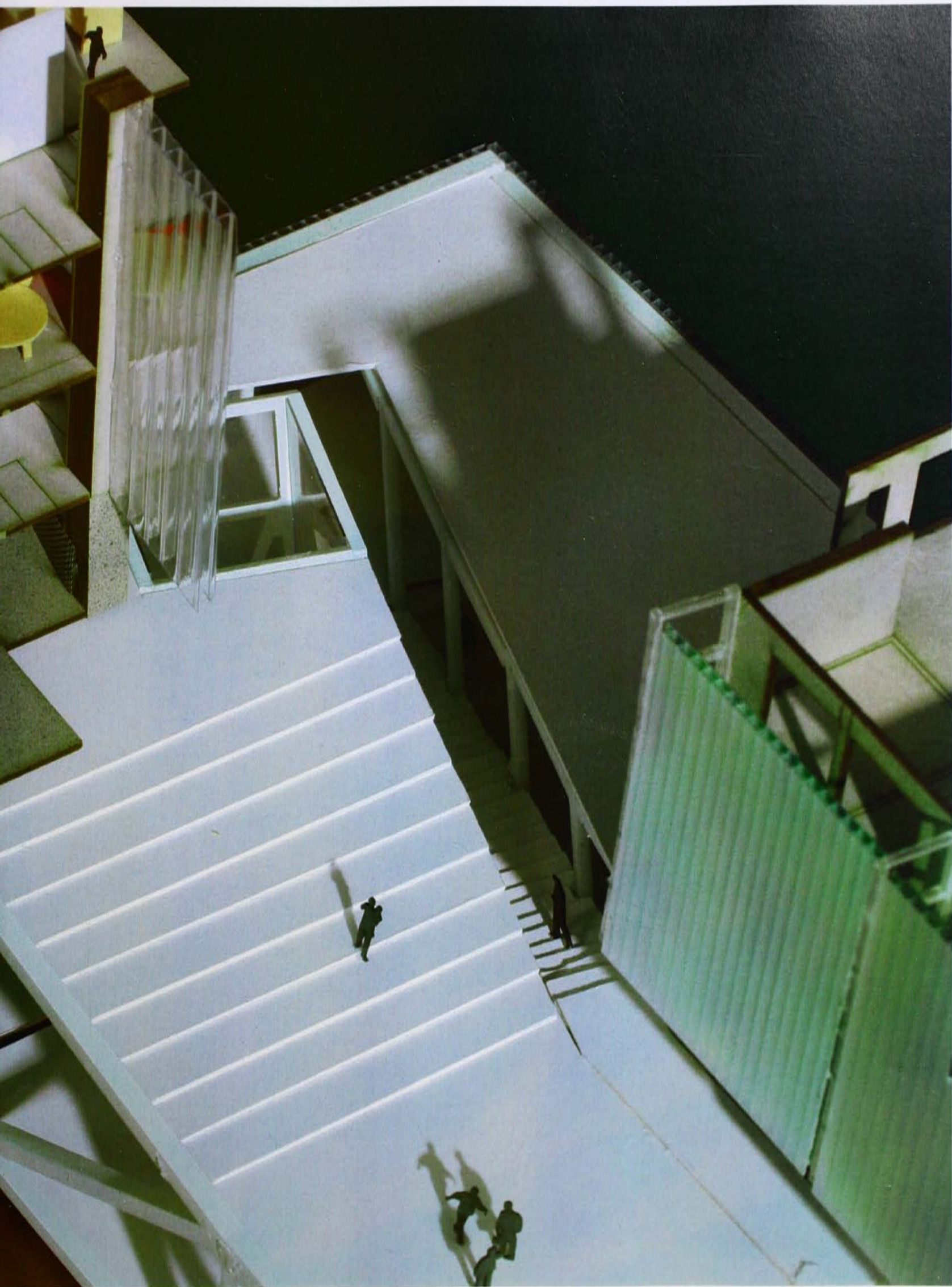


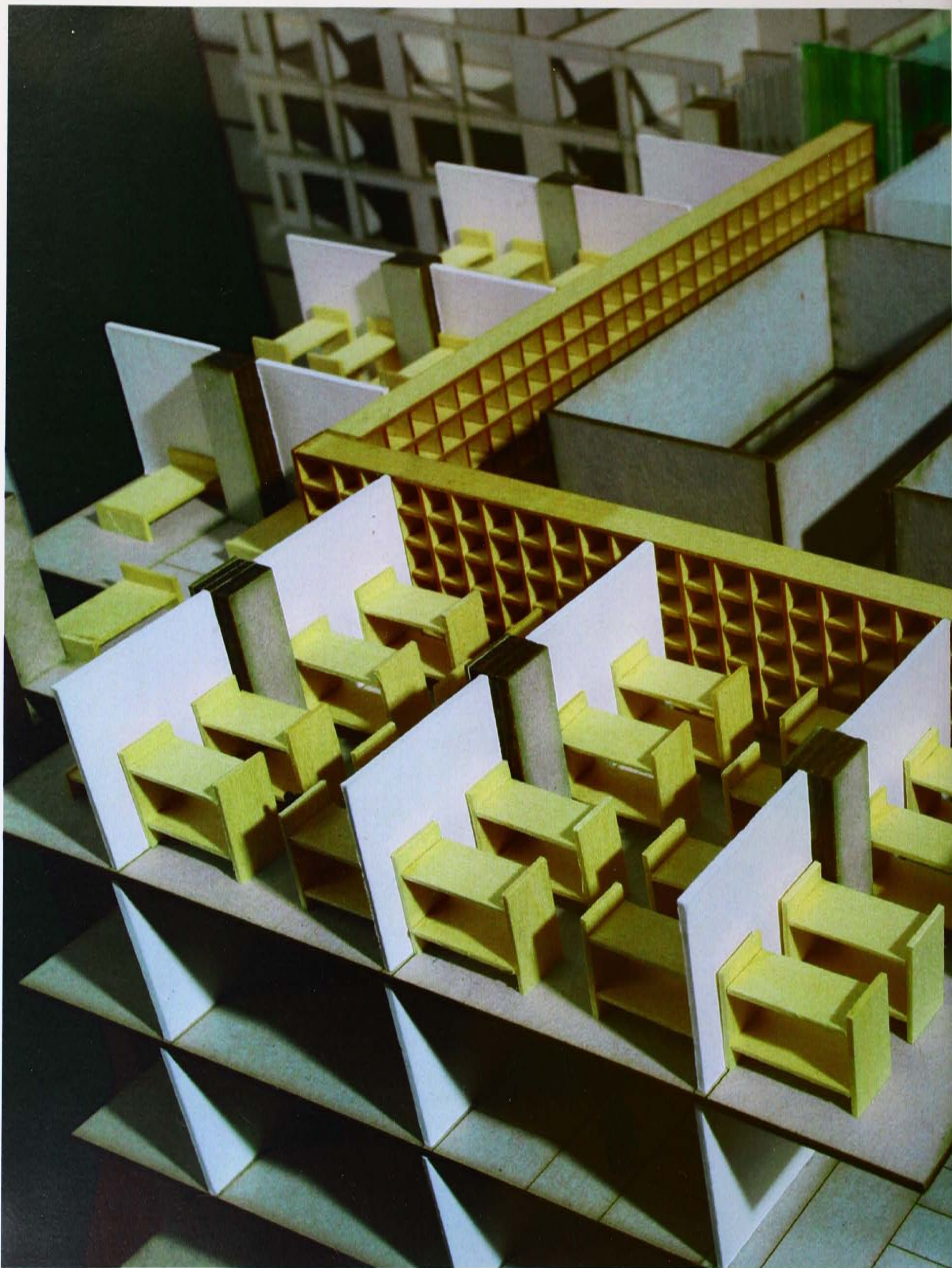


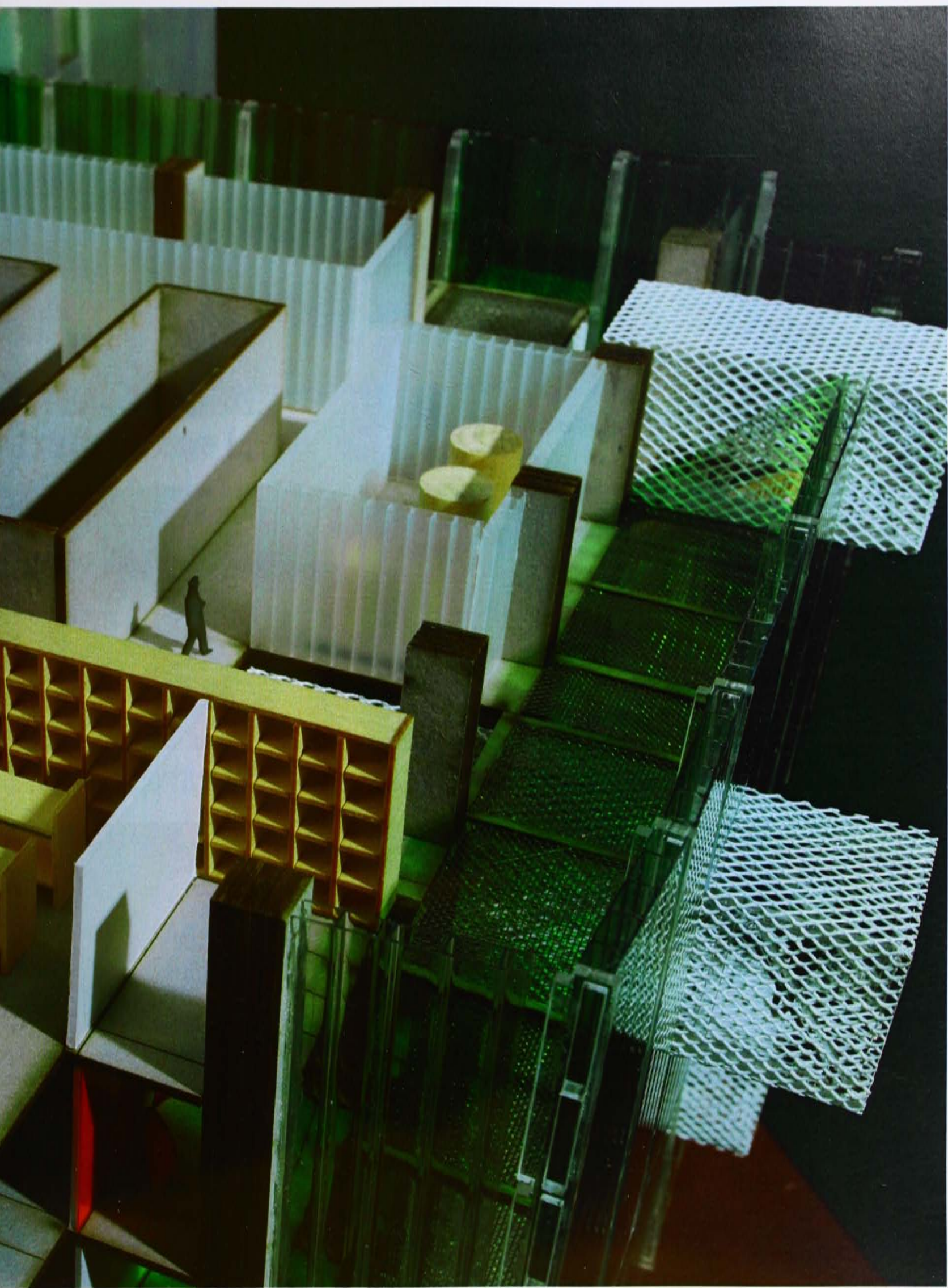














└ experiencing urban r



└ worker's module - work/common space



└ hydroponics produc



└ worker's module - interior



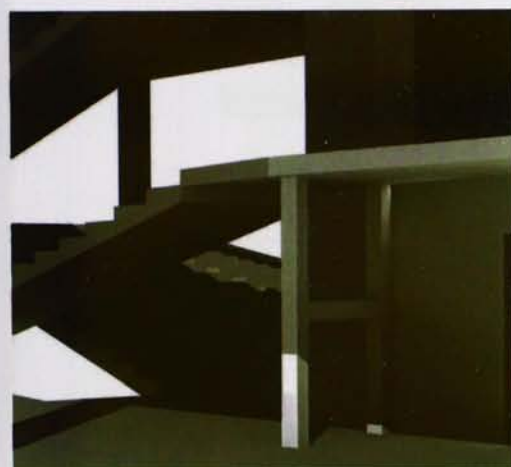
└ event space



ruin



└ halfway up



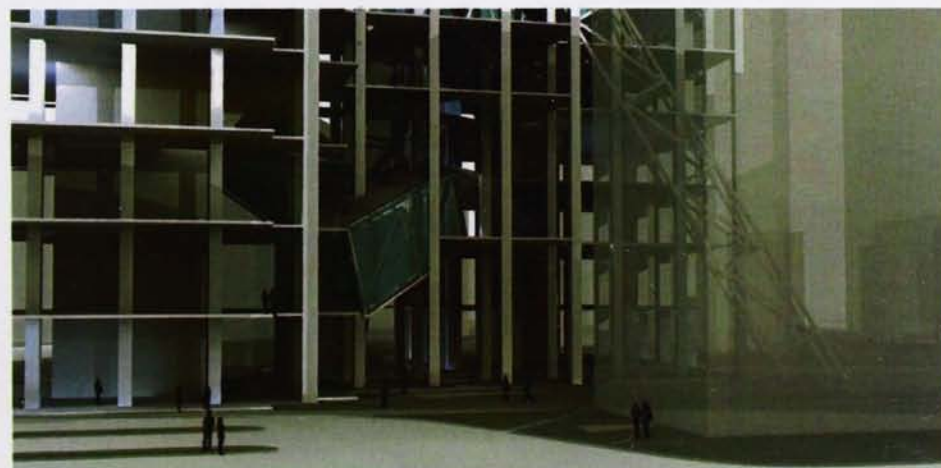
e tasting



└ podium

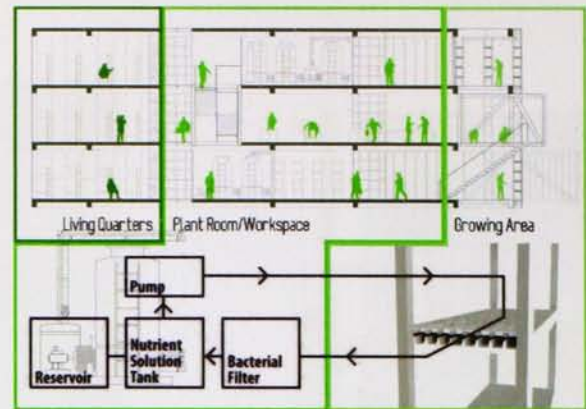


└ approach



└ Experience

vertical hydroponics farming

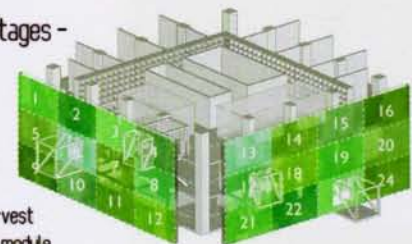


cropping pattern : a seasonal & local mix



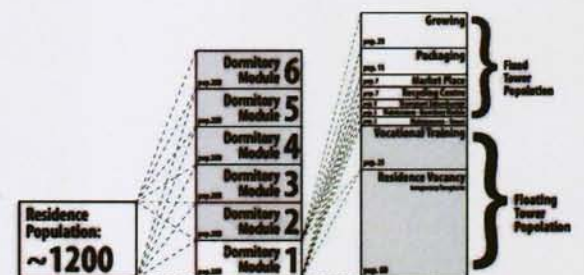
crop rotation: a 24-day cycle

growing stages -
germination
seedling
harvest

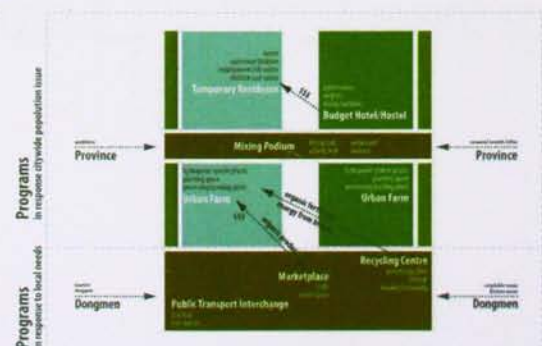


everyday harvest
in a 3-storey module

a vocational and employment buffer



a sustainable mix of program



urban ruins –
empowering the
underprivileged



cropping pattern : a seasonal & local mix

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
herbs	Basil								Basil			
				Parsley	Parsley					Parsley	Parsley	
vegetables		Spinach	Spinach						Broccoli	Broccoli		
				Broccoli	Broccoli							
fruits	Tomatoes	Tomatoes							Peppers	Peppers	Peppers	
				Peppers	Peppers							
flowers	Marigolds	Marigolds										
				Lavender	Lavender						Lavender	Lavender

[illegible]

a vocational and employment buffer

Residence Populations: ~1200

Secondary Markets 1 through 6

Tertiary Markets:

- Fixed Income Populations:
 - Sec. 10: Engineering
 - Sec. 11: Management
 - Sec. 12: Health Prof.
 - Sec. 13: Business
 - Sec. 14: Education
 - Sec. 15: Social Services
- Floating Income Populations:
 - Sec. 16: Residence Vacancy

[illegible]

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17 SEP 2010 5:48pm	5:16pm	
	21 SEP 2012	
24 MAR 2011	6:45pm	
8:45pm	- 5 OCT 2012	
14 SEP 2011	6:45pm	
8:10pm	12 OCT 2012	
	6:45pm	

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